

“In the beginning was the Word, and the Word was with the Symmetry,
and the Symmetry was the Word”

Pythagoreans

«'Εν ἀρχῇ ἦν ὁ λόγος καὶ ὁ λόγος ἦν πρὸς τὴν συμμετρίαν
καὶ συμμετρία ἦν ὁ λόγος.»

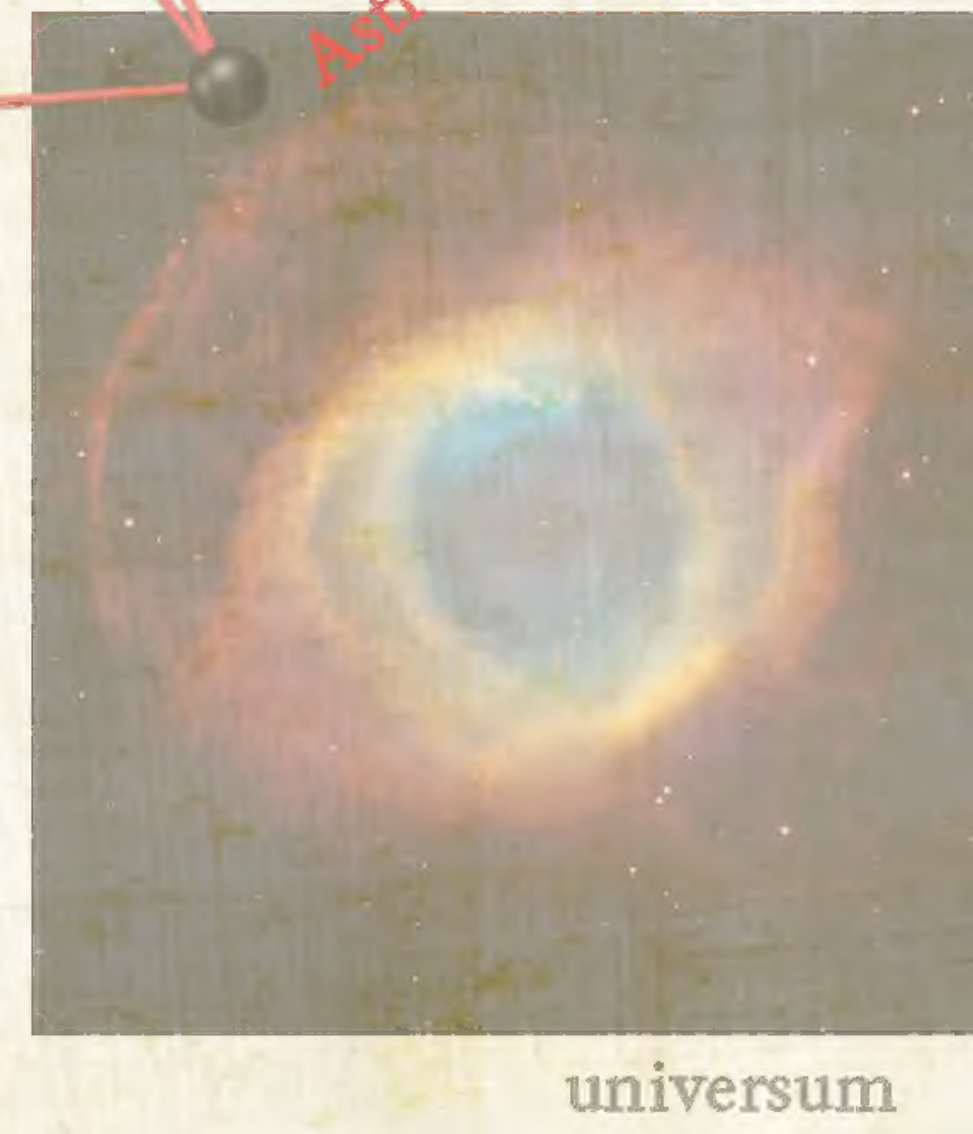
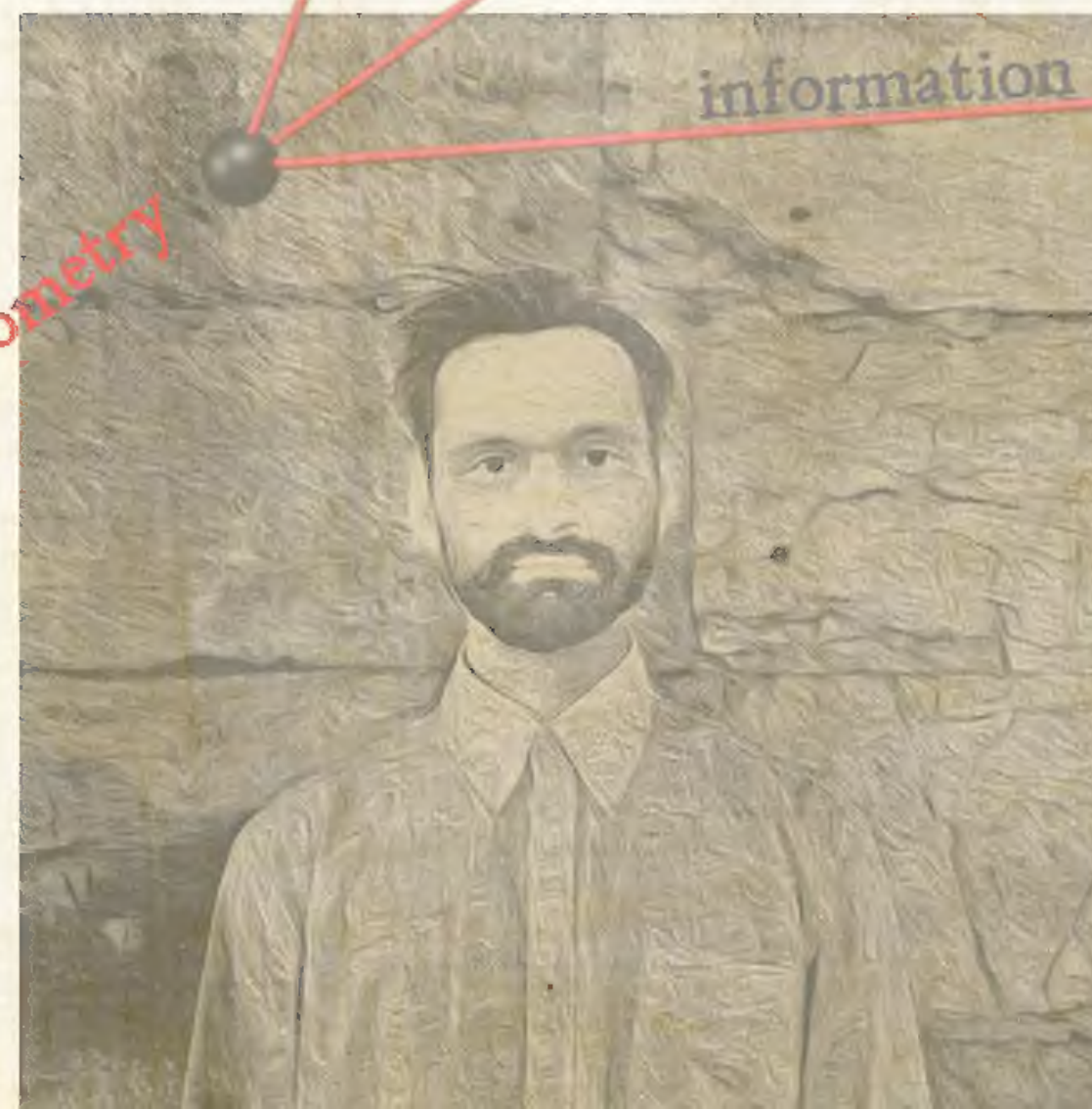
Pythagoreans

**Greek Alphabet &
Multidimensional Semiotic Theory:
Words, Circles, and
Fibonacci Sequence.
A New Perspective Era
in Occult Philosophy III.
Novel Observations.
3rd Edition.**

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universum

1st PART (01/02)

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From Ancient Greek Language to Modern Semiotics: Exploring Interdisciplinary Connections & the Evolution of Sign Systems through the Study of Ancient Greek Letters as Their Component Elements

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Abstract

The impetus for this research was observing the geometric characteristics of the *ancient Greek capital script* from an architect's perspective. The central idea was based on the search for **mechanisms utilizing geometric principles as a reference point for forming certain words**. These observations, alongside other findings from three years of research, could be practical in creating a new language.

This concept also resonates with the Transhumanistic goals of enhancement of the individual. The enhanced intellectual capacities may also create the conditions for a new language with connection points to mathematics and geometry.

The results highlight the analogical relationship between the artistic spirit, the interdisciplinary research approach of Greek polymaths, and the multifaceted education of ancient times. In this context, a *cultural semiosphere*, without strictly distinct and segregated sciences, is observed to have been a source of different *meanings and* enriched the development of the *Language (langue)*. The placement of letters in certain words seems to **have been influenced** by the **approaches** of the **arts, architecture, mathematics¹, and philosophy**.

Semiotics offers a new dynamic perspective by incorporating interdisciplinary approaches, allowing new connections and **meanings to be discovered**. Within this framework, an attempt is made to present a point of intersection between *abstract design* and the *linguistic unit* of an *alphabetical code*.

Researcher's Note

This is the 3rd Edition, which is in English and more extensive, with 14,200 words, providing additional information on the development and substantiation of the arguments. However, a more specialized scientific analysis is needed on this issue, as it contradicts an established position in 20th-century *Structural Linguistics*.² The article was initially developed in Greek, consisting of 5,000 words, and includes well-documented arguments drawn from international scientific literature. The proposed model aligns with some widely accepted perspectives within the scientific community and introduces a new viewpoint grounded in *Visual Semiotics; Traditional Linguistics* of 20th century A.C. rejects this framework. Nonetheless, the article provides certain

¹ In "*Republic* 524d-530e," Plato outlines the five mathematical sciences (which reflects the Pythagorean quadrivium, with geometry divided into "plane" and "solid") (Olsen, 1985): (1) arithmetic, (2) plane geometry, (3) solid geometry, (4) harmonics (music), and (5) spherics (astronomy). Researching pharaonic architecture surfaced Pythagorean geometry and arithmetic, influencing the Greek thought process.

² Swiss linguist Ferdinand de Saussure (1857-1913) founded *Structural Linguistics*. Saussure introduced the idea that language is an autonomous system of signs, interconnected through relations and contrasts, and he established the concept of the *arbitrariness* of the *sign*.

instances that either suggest a wealth of unknown ancient insights or represent peculiar coincidences that merit mention.

Keywords

Alphabet, Hieroglyphics, Meaning, Abstraction

Prolegomena

In the early 20th century, Vendryes (1931: 347) stated that “*In the grammatical field, Greek is distinguished above ~all other languages by the precision of its morphemes which renders the word-formation so lucid, and the graceful suppleness of its syntax which gives to every thought its full value, following its every movement and reflecting each fine shade in its transparent depths.*” Concurrently, Bloomfield (1935: 4) noted that “*The ancient Greeks had the gift of wondering at things that other people take for granted. They speculated boldly and persistently about the origin, history, and structure of language.*”

Inspired by these reflections, this research adds some observations that connect specific **graphemes**³ with *semantic dimensions/structures* of forms. These observations are structured in the *Peircian* and *Kress/Leeuwen Semiotics* and correlate to the inherent geometric patterns, which carry the same or similar *meanings* unaltered across time.

Framework

Linguists Daniels/Bright (1996: 3) define writing as “a system of more or less permanent marks used to represent an utterance in such a way that it can be recovered more or less exactly without the intervention of the utterer.” Suppose a system’s **graphemic unit** (*grapheme*) corresponds to the **signified** (**plane of content, idea**). In that case, the system is called **semasiographic**, while if they denote some aspect of the **signifier** (**plane of expression, sound image**), it is **phonographic**. (Karali, 2020: 186).

In the *first supercategory* belongs the *logoconsonantal* script (Egyptian hieroglyphics), which will inspire the *consonantal alphabetic script* and form its *graphemes* with a more abstract rendering than the former. (Coulmas, 1991) The dual phonological quality of the Egyptian *pictorial sign*—with *morphographic* and *phonographic* values (utterance of *morpheme* and *phoneme* respectively)—will serve as the springboard for producing the *consonantal script*. It is likely that the Semites, following Egyptian influences, tried to adopt a similar *acrophonic* representation for some of their *consonants*. (Rogers, 2005: 108-118) Subsequently, according to the prevailing position of the *Sinaitic Theory*⁴ (Diringer, 1953: 199-200), the Phoenician *consonantal writing*, continuing the evolutionary tradition, lent its *written signs* to the Greek *phonetic alphabet*. (Sellier, 2021: 130)

In summary, the fertile exchanges between cultures would organize new *writing systems* based on the previous ones. Inevitably, in the representation of sound, different levels of design *abstraction* were distinguished (Diringer, 1953: 195-222). The

³ Linguistic term: The smallest functional unit of a writing system (Coulmas, 1996).

⁴ David Diringer (1953), a British linguist, palaeographer, and author, refers to various *linguistic theories* regarding the origin and evolution of the *alphabet*. The *contemporary linguistic* position accepts the *Sinaitic Theory*.

pictorial sign with the "*natural similarity of grapheme*" and *concept* produces the *symbolic*, i.e., "*conventionalized, stylized shapes*" under gradual abstraction until the final loss of the property of the *pictorial* aspect. Over time, the *symbolic sign* would only capture the alphabetic system's auditory aspect (*phonemes*: *denotation* of individual sounds). (Karali, 2020: 187-189)

The *natural selection* of optimizing hundreds of *pictorial signs* by adapting them to a specific set of *graphemes* (exclusively associated with *phonemes*) was not an extraneous cultural phenomenon. This evolutionary model took place within a cultural range under a *design semiosphere* (*Arts and Architecture*; geometric harmonic construction (Lund, 1921: 171), "*Euclidean*" *shapes*, and balanced element relationships) that was in direct contact with Egypt, receiving continuous influences while seeking its uniqueness. Indicatively, the geometric period with *abstract geometric shapes*, the *classical period* with the complex design of the *Parthenon* (Tournikiotis, 1994: 67), Vitruvius' treatise *De Architectura* presents the general education of the classical architect (Vitruvius, ca. 30–20 B.C.E./2000: 1.1.1; Kruff, 1994), collectively contributed to the evolutionary elevation of Arts. Similarly, Danesi (2004: 110-114) mentions that the *alphabetic signs* derive from **long-standing cultural fermentations** of *pictorial signs*, often **unnoticed today**, as interpretation eludes due to apparent cultural and educational differences. Additionally, the development of writing paralleled the evolution of numerical systems. Each letter is positioned as a *connotative signifier* of a number and is used both in mathematics (as a "processed" *metalanguage*) and in *mysticism*—structured into words (Ifrah, 2000: 186-226) (within connotative "metaphysical" levels). Words were likely perceived as magical or mystical forms/shapes due to their pictographic structures (Kress & Van Leeuwen, 2010/1996: 55) and divine origin, for example, in Egyptian writing (Plato, *Phaedrus*, 274c–275b). Moreover, those knowledgeable in writing were considered to possess supernatural or magical powers (Danesi, 2004: 107-110). In spatial evolution and timeline diagram, the *grapheme* does not shed its mystical "hieroglyphic shell" (Leibniz as cited in Derrida, 1967: 120) but is re-positioned "silently" and discreetly. (Fig. 1)

In the contemplation research, it is posited that the points mentioned above establish the debates (a) regarding the significance of the names established by either *convention*, **nomos** (νόμος), or *nature*, **physis** (φύσις), and (b) regarding the handling of human speech and the understanding of its function from the perspective of *regularity* or *analogy*, **analogía** (αναλογία), as against irregularity or *anomaly*, **anomalía** (ανωμαλία). (Robins, 1989: 35-39) From antiquity to the establishment of

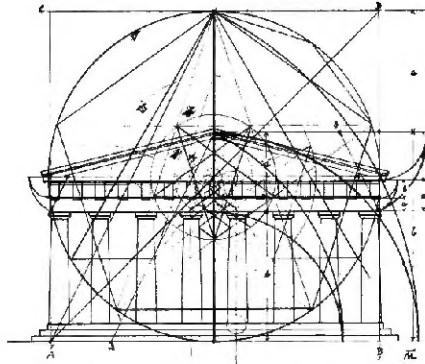


Figure 2. Parthenon. Analysis of the front.
(Lund, 1921: 171)

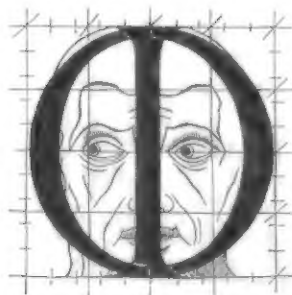


Figure 3. Design proposal of the letter phi, Φ,
derived from I + O
(Tory, 1927: 55)

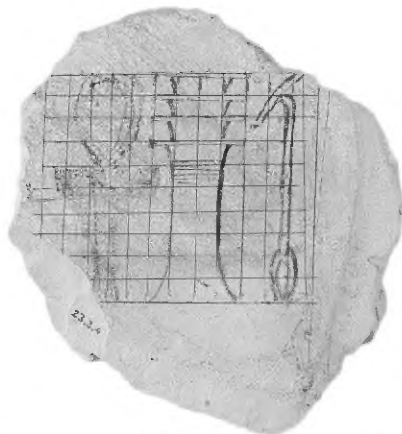


Figure 4. Preliminary Drawing with gridline
as a basis of Hieroglyphs by an ancient artist
(1479–1458 B.C.) [Limestone, ink], New
Kingdom, Dynasty 18, Hatshepsut and
Thutmose III, Upper Egypt, Thebes. MMA
excavations, 1922–23. Rogers Fund
(Accession No.23.3.4). The Met Fifth Avenue
in Gallery 117, New York.

the "Saussurean linguistic sign," the evolutionary design model of *graphemes*, within which the levels of *abstraction* are denoted in a *temporal analytical process* (Kress & Van Leeuwen, 2006: 94) under the designer's microscope, may have been overlooked.

More precisely, in some *graphemes*, a refined *act of abstraction* is comprehensible, with a "silent" connotation of foundational elements of "existence," structured in analogies based on concrete reality or "imaginary" models as a profound *cultural construct*, given that written signs are not mere scribbles. Conversely, through *speech* (with everyday issues) and expressive needs, arbitrariness will overshadow the connoted message (Barthes, 1977: 33-34) of the ancient "photographer-thinker."

Since both *speech (parole)*⁵ and *writing* differ for every individual, the handwriting style (De Saussure, 2011: 119) for the ***script basis system (in my terminology)*** is similar to the *speech (parole)*. The individual handwriting style has psychological implications (in personality analysis) or is adapted to professional fields (like doctor's prescription). Analogously, the geometric harmonic construction—a basis of a harmonical system—(Fig. 2) in the arts and architecture determines the visual result. The sketching technique—whether drawing a sculpture or a museum—is insignificant for the internal architectural system of the basis, which coincides with the geometric construction basis of *graphemes* (De Saussure, 2011: 120) (Fig. 3). The *script basis* is established by designers/engravers over the centuries (Fig. 4). Therefore, a "middle"/agreed design image of the *grapheme* is established, depending on harmonic relations/proportions of the lines (as in design), and inevitably, it **condenses personal and/or collective meaning** (Tory, 1927: 52-120).

The *script basis* is a *cultural product* of the faculty of arts and maths and a collective procedure of unknown designers with "necessary conventions" aimed for *cultural evolution*. **These conventions** were adopted by societies of polymaths, **fostering individual growth within the evolving society**.

This research does not align with the principles of *Structural Linguistics*. Some Saussurean positions are mentioned since they serve the analysis in developing the observations and provide a synthesis with *Kress/Leeuwen Semiotics*. It is assumed that *Language* is utilized as an instrument of overt or tacit communication or a tool of thought. In this context, *Language* cannot exist in an autonomous field. Inventing some words is essential to shape them with the cooperation of *Philosophy, Arts, Architecture, and Mathematics (as a broader domain of Plato's separation)*. Since *Language* follows the "evolutionary model" and unknown individuals or groups follow *natural selection* to optimize its internal structures, they develop new internal systems, and regarding what existed as an "Old Language," they could develop the *G-Language* (as I call) on an internal *meta-language level*, which does not have an interest in a linguist dealing with *Formal Linguistics*, par example, *Phonology* or *Morphology*. The "evolution" of *Language*⁶ follows the evolution of civilization; for instance, new *graphemes*, *phonemes*, or *morphemes* have been invented to express or follow new mental or material achievements that occur at a place that did not remain unaffected by external factors.

The *G-Language* is a product of a *cultural semiosphere* and owns a *universal alphabet* in terms of *design semiosphere* of a broader area beyond the geographical boundaries of Greece. From Chomsky (2002: 108), I draw the reference to the *universal alphabet*; he mentions "it should contain all the information required to determine how signals can be generated and how they can reflect a refined level of perception." I do not refer to "ideal phonetic representation" but to an *ideal visual representation* that cooperates with different sciences and leads to single words or *syntagmas*. As Chomsky (2002: 108) very aptly notes, and I paraphrase about the *G-Alphabet*, a *visual alphabet symbol* is "appropriately regarded as a set of features," each with a specified dynamic

⁵ "The study of speech is then twofold: its basic part—having as its object language, which is purely social and independent of the individual—is exclusively psychological; its secondary part—which has as its object the individual side of speech, i.e. speaking, including phonation—is psychophysical." (Saussure, 2011: 18)

⁶ The term "evolution" is utilized in the sense of the invention of new meanings and abstract concepts associated with the evolution of science and its interpretation of reality.

value. This *dynamic value* is defined by *abstract curves* that have an essential *meaning* in the matter. Thus, a *signal-figure-grapheme* is represented as a sequence of such sets.

The definition of *Language* is borrowed from Chomsky (2002: 13), who “considers a language to be a set (finite or infinite) of sentences, each finite in length and constructed out of a finite set of elements.” This assists in developing an internal design system based on an *abstract plane of expression* that produces a set of *mechanisms* and *rules* to extract some *syntagmas*. Just as the elements are combined with some *rules* in a *sentence* and convey *meaning*, the *graphemes* are combined with *rules* to convey at least one *visual meaning*, which is significant for at least one social group (such as artists, priests, etc.). Accordingly, “a language is specified by giving its ‘alphabet’ and its grammatical sentences” (ibid: 21), and it “is a social phenomenon” (Lévi-Strauss, 1963: 56). It is important to note that *Language* and *culture* are both constructed from “oppositions, correlations, and logical reasoning” (Lévi-Strauss, 1963: xi). Thus, *Language* is a *conceptual model* for other aspects of *culture*, which can also be considered *forms of communication* (Lévi-Strauss, 1963: xii). Based on an architect’s understanding, it can be divided into audio and visual *communication*; the body of the last one is the alphabet, which composes and knits visual communication on multiple levels.

According to Chomsky (2006: 21), the *Alphabet* is “the finite set of symbols out of which its elements of sentences are constructed,” and it is assumed that it should be examined based on the *cultural semiosphere* of its existence that has a defined number of *graphemes* in a specific period. “Each sentence is representable as a finite sequence of these graphemes” (ibid: 13); therefore, it could exist in an internal mechanism to extract some *syntagmas*. It is hypothesized that some *syntagmas* would form the number of *graphemes* in some periods because of the *internal generation mechanism* that serves some *targets*. As a *syntagma*, the word is formed based on the cooperation of *Philosophy-Arts-Architecture-Mathematics*. It follows a set of design grammar rules and would be extracted from a computation since the whole system is founded in *mathematical logic*.

It is crucial to note that the system of *design language grammar structure* has an analogy with the *language grammar structure* (Mitchell, 1990: 8; Stiny & Gips, 1972; Saussure, 1993: 133), and to be more specific in *Generative Grammar* (Chomsky, 2006: 91-92). *Generative Grammar* “attempts to characterize explicitly the intrinsic association of phonetic form and semantic content in a particular language.” Similarly, *design Language grammar structure* or “Geo-dorwid” (as I call it) aims to express the intrinsic link between *phonetic form*, *Mathematics* (in Plato’s terms), and *semantic content* connected in *connotative levels*.

This analogy is reflected in some elements’ combinatorial and compositional nature, following strict *rules* to transfer *meaning*. A system of *rules* generates an *outcome* without the unaware observer immediately identifying the underlying *abstract mechanisms*, whether in the *Language* or the *Arts* and *Architecture*. Suppose there has been matrimony between these fields; it would generate some *abstract mechanisms* that function as the productive power for *syntagmas*. This reasoning is extracted from the fact that *Language*, on the one hand, expresses the human mind and, on the other hand, has limitless scope and is based on a “recursive principle,” allowing each creation to serve as a springboard for a “new creative act” (Chomsky, 2006: 90). Both in *Arts* and *Architecture*, the syntheses design demands combinatorial and compositional mastery that could extended in other fields since there is no distinct division between the sciences in antiquity.

Furthermore, “*possession of human Language is associated with a specific type of mental organization*” (Chomsky, 2006: 61-62). This is why *graphemes* represent the *phonemes* or *morphemes*, conforming with the *design semiosphere* of *Arts* and *Architecture*. In the era of Greek civilization, the *scripts* of *Linear A* (*logo-syllabic script*) and *Linear B* (*syllabic script*) (Chadwick, 1987), the *Phoenician Script*, the *Greek script* with its evolution and the variety of *capital graphemes* in 9th to 6th century B.C. illustrate a modification of conditions in the way of representing the sound. With this modification occurring over 2000 years, with the last one linked with the Egyptian era (*hieroglyphics*), it is hypothesized that it generated *tacit connotative abstract levels* to some *morphemes* or *words*.

Within its *connotative abstract level*, some unknown designers could have organized *abstract mechanisms* regarding their expression of knowledge and wisdom since they belonged to some *social class* with a *broader range of education*. These *mechanisms* should have a *hierarchical form* extracted from ancient structures. Observing a simple example of an ancient temple or a sculpture, it is evident that they have a hierarchical arrangement of small elements to form a general idea of something intellectual. The concept of the hierarchical organization could be identified in the *syntagmas*; different *words* serve a *plane of expression* and *content*. Thus, this *reasoning* is extended to a *minor level*, which is the *graphemes*. *Design rules* may have led to the composition of some temples; therefore, some unknown designers should have matched this wavelength with a corresponding procedure in some *onomatopoeias*.

The form of “*Geo-Dorwid*” is related to the definition of Wilhelm von Humboldt’s “*form of Language*” (as cited in Chomsky, 2006: 62), who defines it as “*the constant and unvarying system of processes underlying the mental act of raising articulated structurally organized signals to an expression of thought*.” In this term, the laws of generating a *recursively generated system* remain steady and constant; however, their exact scope and manner remain unknown (Chomsky, 2006: 62), and it is open for research. Additionally, Humboldt (as cited in Chomsky, 2006: 67) “*held firmly that underlying any human language we will find a system that is universal, that simply expresses man’s unique intellectual attributes*.” Thus, the circle is considered a design tool of “*Geo-Dorwid*” as it could generate a universal unspoken system. (Fig. 18)

In this scenario case and my way of thinking, the archetypes of Jungian psychology contribute to constructing this universal system. These *collective unconscious contents* (Yung, 1980: 4) refer to “*primordial types with universal images that have existed since the remotest times*.” Historically, the first attempts of the first man’s constructions for *shelter* (Norman, n.d.) and *God worship* (UNESCO World Heritage Centre, n.d.) were *circular*. The Greeks modified the circle function, adapted it as a word production mechanism, and utilized it to express concepts of divinity. It is worth mentioning that “**Greek myths attributed writing to Hermes or other gods**” (Diringer, 1953: 17); therefore, **the circle at the connotative design level** could function as a productive mechanism. In simple terms, God is invisible and has the role of an “invisible” machine that “produces,” and analogically, a circle is a tangible machine that produces anything in a 2D geometrical context. Consequently, the integration of circular forms in Greek language and architecture illustrates the profound connection between *universal archetypes* and *cultural expressions* of divinity.

As a subset of the *cultural semiosphere*, the ancient Greek *design semiosphere* consists of an inseparable wholeness in its history. Some instances that could verify this conjecture, at least in some historical periods (that means it could have created a tradition from there and then or they incorporated an older system), are **Pythagoreanism** from the 6th century B.C. and Vitruvius’ treatise **De architectura**. It

should be noted that *Pythagoreans* (Olsen, 1985) should mainly have mastery in Design, Music, Maths, and Astronomy. Furthermore, **Vitruvius** (ca. 30 20 B.C.E. 2000: Book 1, 4, 5, 7, 9) describes various information on Greek Architecture, providing other scientific fields that consist of wholeness in the *design semiosphere* of Greek architecture. These are mentioned because, in human history, one person is enough to shape a trend, a design approach to a system that concerns a field.

In analogy with *Arts and Architecture*, the *graphemes*, as fundamental drawings in a social phenomenon (*Language*) and a culture, would have had connotative levels since Lacan (2001: 78) supports that “the psychoanalytic experience has rediscovered in man the imperative of the Word as the law that has formed him in its image.” The symbols provide the *shared language* by which meaning is constructed and communicated within a culture and have the power to define things. “Man speaks, then, but it is because the symbol has made him a man” (Lacan, 1977: 49). The symbolic representation of objects, ideas, and associations within a cultural context shapes the perception of reality and its understanding (Lacan, 1998: 83). Symbols are deeply entrenched and influential in structuring societies, demonstrating their importance in governing social interactions. Moreover, Lacan (1977: 47) mentions that “what defines any element whatever of a language (*langue*) as belonging to language, is that, for all the users of this language (*langue*), this element is distinguished as such in the ensemble supposedly constituted of homologous elements.” This statement answers straightly in the connotative levels of graphemes that agree with the narration and concept of a word or syntagma.

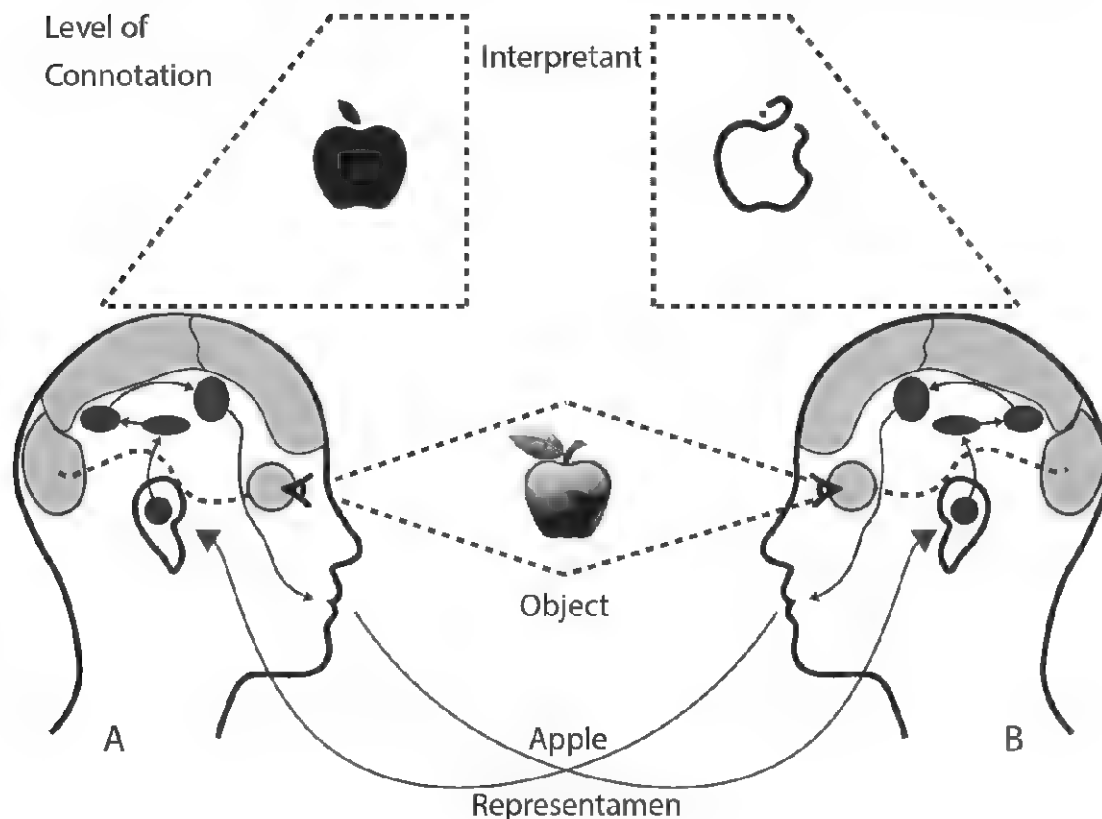
Thus, the signification of the graphemes in a **sound sequence** functions with an alternate character, like the signification of the myth, which Barthes explains in the ‘*Mythologies*.’ The **graphemes’ signification** provides “the meaning of the signifier and its form, a language-object and a metalanguage, a purely signifying and a purely imagining consciousness.” (Barthes, 1972: 121) In this sense, “the concept gathers up these opposites as an ambiguous signifier, which is both intellectual and imaginary, as well as arbitrary and natural.” (Barthes, 1972: 122)

This suggests that the form’s elements (the *graphemes*) have a spatial presence: their elements are associated with a place and a proximity. The **pictorial concept** appears globally; one might describe it as a sort of “nebula,” a “condensation,” less shadowy but more tangible, of particular “knowledge.” Associative relations link its elements: it is supported not by an extension but by a depth: its mode of presence is memorial (Barthes, 1972: 120-121), through which they retain cultural value over time. This ‘memorial’ feature can be comprehended as how cultural forms, such as the *graphemes*, preserve and transmit knowledge, storing it from decay and loss over time. This can be noticed in the slight deviation of the *spelling* from modern to ancient Greek, as well as the partial mutation or preservation of some *capital letters*. The existence of “secret” social groups in the last 3 millennia, preoccupied with spirituality, religion or and mathematics, keeps the *internal language system* relatively unchanged. The correspondence of *letters* and *numbers* is due to some “secret” social groups of the past that either utilized in science or communicated in code or managed to condense meanings and concepts for unknown purposes that, in the end, need not interest an analyst because perhaps it leaves the limits of *scientificity*.

Apart from the virtues of the internal system, it should be noted that the following observations align with part of Benveniste's (1981 1966) position. The **bond** between the *signifier* and the *signified* is **necessary**, and it is argued that it is also **inevitable** since, without this bond, there is no cultural development, only a primitive fluidity of things. Continuing the reasoning, McLuhan (1994) argues that “the media

are the extension of the senses, while writing is the individualization of vision," while it is posited that it coexists with Saussure's (2011: 15) position that "the very possibility of putting the things that relate to language into graphic form allows dictionaries and grammars to represent it accurately, for language **is a storehouse of sound-images**, and **writing is the tangible form of those images**." By the Probability theory, I consider **visual** and **auditory data** (sensory subsets) as **contingencies**. These contingencies, as visual or auditory perceptions, activate conscious events mental facts (*concepts*), and the individual creates **narrative** and **conceptual representations**. The individual "**chooses the one**" — partial idealized — because "**it has a critical role**" (J. Aumont, 2003, *L'image* as cited in Svalikou, 2011: 37, 93-94). The two subsets and the union of the idea constitute a sample space diagram with contingencies. Based on their actions, reasonable conclusions are drawn and extracted. In the case of *pictorial representation*, the *visual conformation* exists in a *circular semiotic code* with an analogical reshaping order of letters upon a cosmic sphere (Fig. 12), influenced by Egyptian or Medieval *papyrological compositions*.

Figure 5. Diagram of the movement of visual and auditory information. [Designed by P. Petrakis]



Since the *script basis* is a **cultural construct** (Kress & Van Leeuwen, 2006 1996: 21-23, 32-34), it embodies *schematic values* (ibid.: 56), and it is posited that it functions as a visual narrative "proposition" (ibid.: 59-62) with a **signifier form** and **signified meaning**, influenced by an *abstract coding orientation*⁷ (Kress & Van Leeuwen, 2010 1996: 8, 165).

In the realm of *visual semiotics*, words exhibit a dual nature encompassing both *conceptual* and *narrative representations*. Given the potential for *polysemy*, these *representations* integrate multidimensional structures and forms. Consequently, the generation of some *syntagmas*⁸ (**words**) is determined by *Shape*,⁹ *Line*, or *Point Grammar*. Alternatively, these *Grammars* may dictate the quantity and arrangement of letters within a word or establish the maximum number of *graphemes* in an *alphabet*. The resultant of the *syntagmatic constructs* (word) thus achieves cohesive temporal stability; they "froze" like water at the tip of an iceberg. The geometric images cement the *bound morphemes*¹⁰ of *syntagma* between sociocultural elites, such as philosophers, architects, or artists. Undoubtedly, all the above principles-observations can be applied to a possible new language of the 21st century. Suppose the theoretical framework turns towards the principles that will govern a *language*. In that case, supporting these virtues will be easy because somebody has a *white canvas* in front of him.

⁷ *Abstract coding orientation* is a method used by *sociocultural elites* in contexts like high art and academia, which involves reducing the specific to the general and the concrete to its essential qualities. Coding orientations are sets of abstract principles that guide how texts are coded by specific social groups or within specific institutional contexts. It is extended to *visual meaning*

⁸ In linguistics, a *syntagma* refers to a fundamental constituent segment within a text. This segment can be as small as a phoneme or as large as a sentence, including intermediate forms like words or grammatical phrases

Etymology (Wiktionary): From *συντάσσω* (*suntássō*, "to put together") + *-μα* (*-ma*) and *συν-* (*sun-*, "with, together, co-, syn-") + *τάγμα* (*tágma*, "command, order")

⁹ Stiny & Gips (1972), as pioneers, utilized *Shape Grammars* to generate shapes, defining non-representational geometric art algorithmically. As a proposal, their method could be applied to language as a tool to extract some words with geometric rules via *Shape*, *Line*, or *Point Grammars*

¹⁰ "A *morpheme* is the smallest meaningful constituent of a linguistic expression" (Haspelmath, 2010). Bound morphemes function exclusively as components of words, requiring attachment to a root and often co-occurring with other bound morphemes.

Levels of Connotation/Visual Interpretant:

{unlimited semiosis}

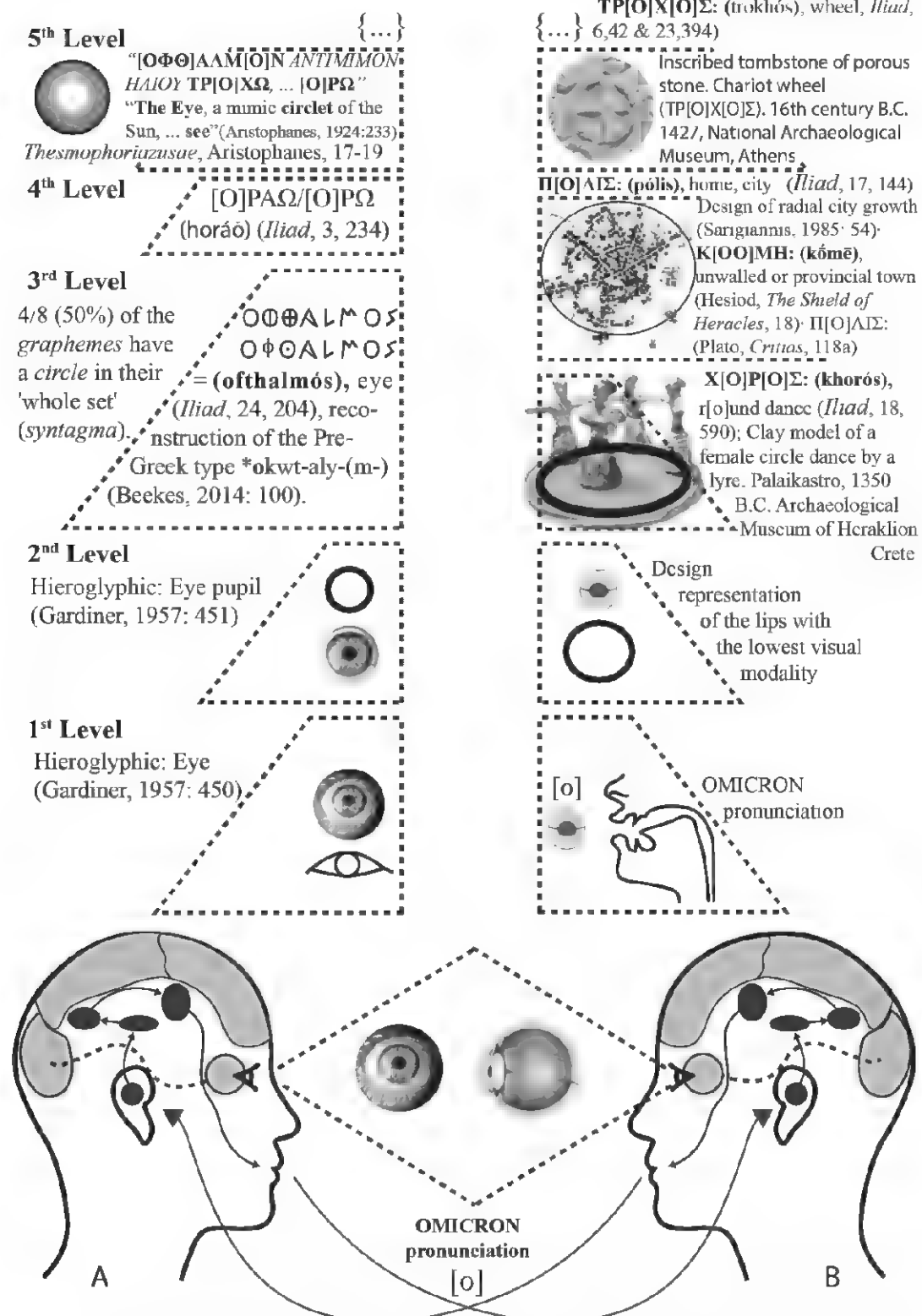


Figure 6. Possible establishment of OMICRON through observation and consensus. [Composition by P. Petrakis]

Observations

The "silent" *numerical values* of the Greek words (such as 'Θεός' - 'Άγιος' - 'Αγαθός' 284: 'theós, God' - 'hágios, Saint' - 'agathós, Good' 284), as documented by Ifrah (Ifrah, 2000: 246, 256-262), represent a different approach to understanding language. These three words replaced the direct *pictorial message* with an indirect intellectual and *associative message*, now intended for particular **social groups**, such as a priesthood or philosophers. In this context, it is hypothesized that some *onomatopoeias* resulted from mathematical operations and or geometric explorations. A *cultural semiosphere* with a centuries-old tradition of *mystical* practices, mathematical inquiries both on a "silent" (for instance, in the Pythagoreans) and "overt" (for instance, Plato's *Timaeus*) level, and a design system that crafts masterpieces seem unlikely not to have constructed a mechanism for generating some words, using them in theoretical frameworks, approaches, and reflections.

Additionally, if *Fibonacci numbers* existed in antiquity, it is hypothesized that some designs derive from the sequence analysis. Nothing equivalent has been found in Sanskrit, but the **poetic metric analysis** documents their presence (Livio, 2003, 197). Similarly, it was observed that if the scheme of the *dactylic hexameter* of **Greek epic** (Homeric Epics) and *didactic poetry* is analyzed, the alternation of a *long syllable* and two *short* ones is ascertained (Lypourlis, 2007: 33-34), a fact that corresponds – is connoted – to the *Fibonacci sequence*, with the alternation of an *odd* and two *even* numbers. Regarding *epic poetry*, if the **Point Grammar rules** are drawn from the alternation of *syllables*, an equilateral cross (Fig. 7) is produced, equivalent to the '*theta*' *grapheme*, "⊕," (Karali, 2020: 190), while the "⊕" is preceded in the *syntagma* 'THEOS' 'ΘΕΟΣ'. Interestingly, Pythagoras (6th century BC) directly links arithmetic and music with the divine element.

Some *graphemes*, or *mimographims*¹¹ as Genette (1995: 53) mentions, resemble parts of a symbolic design realm, indicating an analogical correspondence—

¹¹ "The principle of *phonemimography* is clear, but it is not as simple as it may a priori appear, for the reason at least that the sounds of speech can be viewed either in their properly acoustic aspect or in their articulatory aspect. Thus, one might imagine two types of mimetic alphabet: one would represent graphically the sounds of speech, without troubling about the conditions for their production by the vocal apparatus, and the other would imitate the form of this apparatus at the moment of utterance." (Genette: 1995: 53-54)

with an **underlying lowest modality**¹²—between the cosmos of the **design** and the **tangible**:

◦	Ε :	Epsilon	[e].
◦	⊕ ⊖ ⊗ :	Theta	[θ].
◦	ϕ :	Phi	[p ^h].
◦	Ο :	Omicron	[o].
◦	Κ :	Kappa	[k].
◦	Λ :	Lambda	[l].
◦	Σ :	Sigma	[s].
◦	Υ :	Upsilon	[y].
◦	Ω 8 :	Omega	[ɔ:].

Some perspicacious and unknown designers continued some shapes, as their meaning remained unchanged. A sophisticated process of designing some words accompanied the evolution of sound. They *sank* as Erasmus described; the word's sound is a refined outcome. They '*painted*' *abstract masterpieces*, as argued in Fig. 12. It is observed that some are abstract schematic parts when the mouth articulates some sound speeches in its different places (sufficiently extending the sound pronunciation). Some parts of the following analyses are traced in Genette's (1995: 53-62) books that provide an in-depth analysis of the concept of *mimologics*, which involves the study of the relationship between sounds and different *levels of meanings* in *language*. It is discovered that we have drawn common *conclusions*; therefore, it is referred to in his significant analysis. Genette (1995) examines the theoretical and practical implications of how sounds could imitate meanings, which is further below my position support with examples and analysis.

Comparing some of our similar conclusions and considering that the physiology of the human brain has been mostly the same for 3000 years (Summers, 2022), **it seems possible** that the ancient Greeks could have progressed in a corresponding observation and connection of a *simple design figure* with sound. Thus, the expected outcomes in such a small historical timeline of those years could be actual. I am not a neuroscientist or anthropologist to delve into more details.

Creating an analogy between *Architecture*, *Arts*, and *Script*, as an architect observed in the timeline the same forms that repeated "with different cells," accordingly the first attempt of scripts (for illustration, in the hieroglyphs) is to describe the cosmos via drawings that define the first *syntagmas*. Up to the time of the Latins, the *mimetic* effort continued in a refined pattern. (Genette, 1995, σ. 149-158)

The following are my opinions about some graphemes' at a first connotative level:

- With "Ο," pronounced as [o], the lips protrude slightly outward and form a round shape while the tongue is positioned *at mid-height*, similar to *omega*, "Ω 8". The "8" connotes the extended Erasmian value [ɔ:] with the two sub-circles (Fig. 1), as It is observed. In a horizontal

¹² Hodge and Kress (1988: 124) support that **modality** "refers to the status, authority and reality of a message, or to its ontological status, or to its value as truth or fact." Modality, as defined by Gunther Kress (and van Leeuwen 2006: 160), refers to the social judgment of the credibility or reality of a representation, where different social groups may perceive the truth or realism of representations differently. It emphasizes the interactive nature of modality in influencing social affinity and perceptions of reality through the alignment of the viewer with specific forms of representation. "From the point of view of social semiotics, truth is a construct of semiosis, and as such the truth of a particular social group arises from the values and beliefs of that group." (Kress & van Leeuwen 2006: 154-155)

cross-section between the upper and lower jaws, “ Ω ” represents the silhouette of the oral cavity (with the *lowest modality* as a pictogram (Kress & Van Leeuwen, 2006 1996: 166)).

- With “ \odot ,” pronounced as [θ], the tongue (as a dot in the *grapheme*) is placed between the upper and lower teeth, and the lips form a small round shape.
- With “ \perp ,” pronounced as [l], the tip of your tongue rises; as it folds, the tip touches the palate near the front segments of the upper tooth. “ \perp ” represents this in a median head section, showing the tongue's placement on the palate.

As a result of these remarks, a *circular code* (Barthes, 1968: 22) is inferred: the **drawing/grapheme** “ \odot ” means part of the (vowel) *phoneme*¹³ for the **drawing/grapheme** “ \perp ,” thus is justified by a *visual analogy* (Guiraud, 1975: 25-27) with a realm as an *abstract pictogram*¹⁴ (Rogers, 2004: 264) on a *denotative level* (Hjelmslev as cited in Lagopoulos & Boklund-Lagopoulou, 2016: 79-80).

Conversely, “ \mathbf{K} ,” pronounced as [k]~[c], is not related to the transmitter but to the most straightforward design representation of the *visual impression* combined with an instantly perceived *auditory impression* of an *implied object* (‘*Actor*’) hitting a *surface* (‘*Goal*’). The narrative visual proposition will have two participants if the object is defined. Thus, in Kress & Van Leeuwen's (2010 1996: 64, 74) *Visual Semiotics*, the resulting structure is called *unidirectional transactional action*.¹⁵ To be more comprehensible, it is displayed in an instance: The sound of a stone (‘*Actor*’) hitting a wall (‘*Goal*’) resembles the *phoneme* [k], while the *visual data* of the brief reflection could be sketched in a section as follows:

K: Minimal rendering of visual data as a visual extension of the acoustic impression of [k]~[c]:

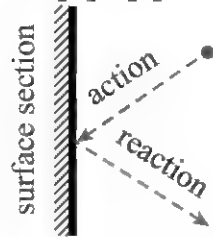


Figure 7. Kappa grapheme

1. Wall surface: \perp = vertical line, as a ‘*Goal*,’
2. The suggestion of the reflected object: $<$ two diagonal lines, as double-direction vectors with an implied ‘*Actor*.’

In the design process, the audio-visual data is hyper-generalized into an *Event* (idealized sketch as *grapheme*), analogous to what happens in the *Chinese dialect* (Kress & Van Leeuwen, 2010 1996: 63). The *grapheme* “ \mathbf{K} ” as the *abstract design* product of the *visual data* with the momentary sound, becomes an idealized sound symbol – a subset of *Peircean iconicity* (Danesi, 27: 2004); the **diagonal double-direction vectors connote the path of the object** (*Actor*). As a design, if generalized, it constitutes the possessive property, the bearer of action-reaction, and analogously, as a *circular code*, it will be found preceded in the Greek *syntagmas* with different roots ‘K-POTOS’ (krótos, noun: into English ‘clatter’ or ‘crac-K’ (k-ra-k)) and ‘K-TYIEΩ’ (ktupéō, verb: into English ‘K-noc-K.’), as a **silent echo of the Platonic dialogue of *Cratylus* (424[b-c], 426c-427a).**

¹³ In *linguistics*, particularly within *phonology*, a *phoneme* represents a group of similar speech sounds perceived as a single distinct unit in a particular language. *Phonemes* are a vital component in distinguishing one word from another

¹⁴ *Abstract pictogram*: A pictogram that represents an abstract object by a conventional drawing, e.g., a single line that represents the number one. (Rogers, 2004: 289)

¹⁵ “A vector, formed by a (usually diagonal) depicted element, or an arrow, connects two participants, an *Actor* and a *Goal*.” (Kress & Van Leeuwen, 2010 1996: 74)

In analogous, the Greek *acrophonic numerals* (decimal system), dated in the 6th century B.C. (Ifrah, 2000: 327), "**formed from initial letters of number names**" (Smith, 1958: 49). In an *evolutionary form* of the *numerical system*, in the 4th century B.C. as documented by both Ifrah (2000: 327) and Smith (1958: 51), *numerical values* were assigned to the *letters* much like how we use numbers to label floors in a building. The previous historical facts imply an underlying union between the *alphabetic* and *numerical systems*. The letters are utilized in sciences as numbers, and it is considered possible to produce mnemonic rules by words that were extracted through numerical calculations in various fields of sciences, such as Astronomy or Mathematics.

These structural analyses of *semiotic phenomena* of some *graphemes* in *syntagmatic types* (*words*) are directly linked to the argument that *letters* are not just isolated elements, but the smallest elements of a broader *semiotic system* – the *Language*. They arise from **interaction with cultural dimensions**, and thus, they are *signs* that are composite parts of it. "*Their messages can be broken down into stable, constant signs, therefore, organized a systematic procedure of signification.*" (Mounin, 1959: 178 as cited in Guiraud, 1975: 30). Some *syntagmas* (*words*), as semiotic visual entities are articulated messages (Guiraud, 1975: 32) since the *graphemes* have **homology** (*structural analogy*)¹⁶ with the idealized forms of physical reality or "imaginary" models.

¹⁶ "**Homology**: the signifiers have the same relation among themselves as have the signified, whereas analogy (in the strict sense) is substantial. Homology does not exclude analogy, and the two can be combined. Thus, the extensive system which in popular parlance assimilates the human to the animal is both homological and analogical. Mane and hair; snout and nose, paws and hands or feet, claws and finger-nails taken term by term are in an analogical relation, whilst the two systems are homological." (Guiraud, 1975: 34) "It is the homology of different systems: astral, numerical, alchemical, physiognomonic, etc., which gives ancient and medieval thought its extraordinary unity: architecture, music, rhetoric, philosophy, etc, constitute homologous codes whose meanings are superimposable and interchangeable. rhetoric, philosophy, etc, constitute homologous codes whose meanings are superimposable and interchangeable." (von Guiraud, 1973)

Figure 8. Analysis of the scheme of the Dactylic hexameter, Fibonacci numbers. [Proposal and analysis by P. Petrakis]

Civilizations establish distinctions between *elements* and subsequently develop their comprehension of reality. This process involves *language*, which relies on the differential relatedness of elements (*syntagmas*) within a system to organize various shades of meaning that contribute to understanding the levels of reality. (Lagopoulos & Boklund-Lagopoulou, 2016: 63) For instance, the *syntagmatic types* 'ΦΥΩ' (phúō, verb) - 'ΑΝΘΟΣ' (ánthos, noun) (Fig. 13) that both of them mean flower in English are distinct *sound sequences* and *denote* material states of flora through their categorizations.

For the observations, some letters acquire a dynamic meaning through their differential position in the set of structures of the *design semiosphere*, while they also have a "static"-general (conceptual) character. Each identified *grapheme* as an *unvoiced abstract pictogram* (as a visual structure) forms a *multi-levelled overt taxonomy*,¹⁷ meaning that the '*superordinate*' *grapheme* is connected with underlying concepts and or *semantic complement*¹⁸ *with possibilities of semantic extension*.¹⁹ In the latter case, the underlying participants ('*Subordinates*') of the *dendroid structure* only need to have a clear and distinct material datum, either material or conceptual imaginary (Fig. 6).

For illustration, in "ΦΥΩ" (phúō),²⁰ each letter:

- [1] phi, "Φ" or "⊖",
- [2] upsilon, "Υ" and
- [3] omega, "Ω",

can be associatively connected with more than one *meaning*.

The phi "Φ" or "⊖" can be easily broken down into two fundamental parts:

- (1) "I" and
- (2) "O."

The "I" acts as a *Vector* with '*passive visual agent deletion*,' and divides the "O" (*Goal*) into two equal and identical parts to design the *minimal Attribute* of the *object*. This *Event* of the *unidirectional transactional action* (Kress & Van Leeuwen, 2010 1996: 64, 74) is a *Peircean symbol* of symmetry in Arts and Architecture.

¹⁷ *Multi-levelled overt taxonomy*: A participant ('*Superordinate*') is connected to other participants through a tree structure with more than two levels. The participants which occupy intermediate levels are *Interordinates*, while those which occupy the lowest level (if the *Superordinate* is on top) or the highest level (if the *Superordinate* is at the bottom) are *Subordinates*. (Kress & Van Leeuwen, 2006: 87).

¹⁸ *Semantic complement*: A grapheme that gives additional semantic information, as in Egyptian. (Rogers, 2004: 297)

¹⁹ *Semantic extension*: A method of creating a symbol: The use of a symbol is extended to other morphemes having the same or similar meaning, e.g., a pictogram of a leg used to refer to the morpheme leg, semantic extension might further extend the use of this pictogram to represent semantically related morphemes such as walk, run, go. (Rogers, 2004: 297)

²⁰ Verb φύω, ΦΥΩ • (phúō) (n.d.: Wiktionary):

(transitive) to bring forth, produce, generate, cause to grow
 (transitive) to beget, bear, give birth to
 (intransitive) to grow, arise, spring up
 (intransitive, present tense) to become [+adjective]
 (intransitive, aorist and perfect)
 (copulative) to be by nature [+adjective]
 (intransitive) to be naturally disposed to, prone [+infinitive to do]
 (impersonal) It is natural, happens naturally [+infinitive that]
 to be one's natural lot [+dative someone's]

Vitruvius (1931, 3.1.1) writes:

*“The planning of temples depends upon symmetry: and the method of this architects must diligently apprehend. It arises from **proportion** (which in Greek is called **analogia**). Proportion consists in taking a fixed module, in each case, both for the parts of a building and for the whole, by which the method of symmetry is put into practice. **For without symmetry and proportion no temple can have a regular plan; that is, it must have an exact proportion worked out after the fashion of the members of a finely-shaped human body.**”*

The passage [3.1.1] discusses symmetry as a *Peircean object*, which encompasses all the grand monuments before the 8th century BC and the design thought process in general (Lagopoulos, 1989, October 26-29: 102-113). Furthermore, Vitruvius (1931, 3.1.2) positioned a man in a circle to extract the basic principles of body proportions for utilization in temple harmonic proportions. The author presents a *homology* between human anatomy and religious architecture while presenting a solid bond and an imaginary geometric ‘*Attribute*,’ the **circle**.

If the design of “**⓪**” is brought into the Vitruvian circle (Fig. 15), it then encodes the symmetry of a living organism and a structure or *object*. Following the reasoning, the “I” is both a *vector* and an abstract *Actor* and, therefore, is embedded in both an *Event* and the *unidirectional transactional action* (Kress & Van Leeuwen, 2006: 64, 74), with the second one reminding the virtues of **Chinese characters** (Ibid.: 63; Rogers, 2000: 29). Additionally, in terms of Kress & Van Leeuwen (2006: 104), it emerges a *topological accuracy* because the analytical process is not drawn to scale, but the way the **straight line (Carrier)** and the **circle (Possessive Attribute)** is interconnected is accurately drawn since they have a permanent geometric property. **This considerable analysis shows that this grapheme is a multidimensional structure** (ibid.: 109); **embedded in narrative and conceptual representations.**

Exploring the *multi-levelled overt taxonomy of the ‘Superordinate’* “**Φ**” or “**⓪**,” and extending the ‘*Interordinates*’ branches (and defining the levels of the *classification*) of the *tree taxonomical structure*, as an *abstract drawing* represents both a *symbolic attribute* of a leaf found at the tip of a plant and a general image of the narrative dimension of underground and aboveground growth. **Borrowed from Eco’s** (1979: 125-126) **terminology**, the “**Φ**” as a “*hypercode which gathers together various subcodes*,” is either “*a weak and transient subcode*,” as the tips of a tree are not always symmetrical or “*a strong and stable*” one since the division of the root system and trunk remains constant. (Fig. 12)

The “**Υ**” is either **one participant (‘Actor’)** or a **vector with two implied ‘Actors’** without the ‘*Goal*.’ As an *actor*, at a first connotative level, it signifies the *abstract idea* of the branching continuum of visual forms, such as the flora cosmos, with minimal visual representation; the action in a *non-transactional process* has no ‘*Goal*’ (Kress & Van Leeuwen, 2006: 63). Thus, in a *multi-levelled overt taxonomy* that is different *connotative levels*, ‘*subordinates*’ would be the possible visual outcome that corresponds in a realm, namely, the act of underground and aboveground growth with the *lowest visual modality* (ibid.: 87, 161-162). Additionally, observing the writing style (8th century B.C.), the unequal angles of the two vectors are noted; which is analogous to the growth of a plant.

As a ‘*Vector*’ with two implied ‘*Actors*,’ in comparison with the philosophy of the symmetric (Lagopoulos, 1989, October 26-29: 114), it *denotes a fractal*, repeating on an unlimited scale of magnification. (Fig. 9)

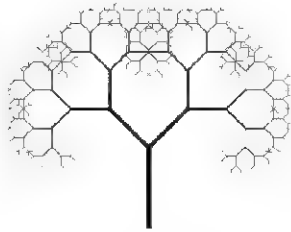


Figure 9 Y, upsilon. The lowest representation modality of a simple fractal tree or a Binary Tree The Root Component as a Structural Oversimplification of Tree Arrangements

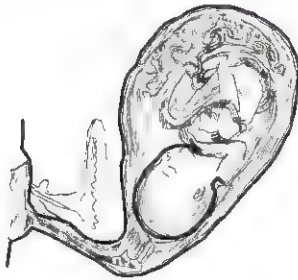


Figure 10 Ω, omega As the silhouette of the womb with embryo; cross-section of the pelvis in the median plane [Sketch by P. Petrakis]

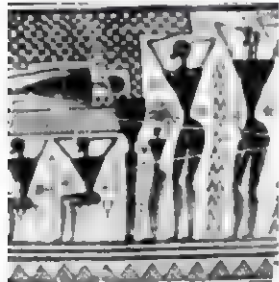


Figure 11 Abstract human forms with the lowest visual modality 760-750 B.C., Dipylon Amphora. Cat. No 804 National Archaeological Museum of Athens, Greece

The curved vectors encode the transition from the unit to the dyad (Fig. 9) which shows a *'metadiagram.'* *"Its symbolic values constitute an abstract pattern as processes and extend the vectorial vocabulary by drawing our attention to possibilities beyond"* (Kress & Van Leeuwen, 2006: 70) the single line. It would energize philosophical reasoning based on the knowledge of the subject. It is both an *'Event,'* as the vectors indicate the deplo-Y-ment without a *'Goal,'* and a *'Conversion,'*²¹ as the single line transformed into two lines with the same point. The link point functions as a *'Relay,'* and then successively, the following points function as *'Relays'* within a chain of transactional processes, acting as *intermediaries* that pass and transform a datum. This transformation exemplifies the dynamic interplay and evolution within the *minimal symbolic structure.* (Kress & Van Leeuwen, 2006: 64, 68-69)

As mentioned above, the "Ω" is connected with the structure of the oral cavity, but in a cross-section of a developing infant in the womb, it appears as elongated through the silhouette of the maternal cavity, as observed in a vast *taxonomy* of animal species. The shape also represents the silhouette of the head, neck, and shoulders from the front (see Fig. 10, 11).

A *multi-levelled overt taxonomy* would organize the depictions of the "Ω" or "8" as *'Superordinate'* 's attribute with the concept of a cavity or a periodical repetition into the same system or the division of the system. Thus, the silhouette is an *unstructured analytical process*²² without the *'Carrier'* that presents a *'Possessive Attribute.'* The shape has the *lowest visual modality; therefore, it connotes more than*

one *'possessive attribute.'* (Kress & Van Leeuwen, 2006: 104)

For instance, the concept of a cavity could be in an active state and contain

- Animals: Such as their uterus giving new life,
- Novel ideas: Such as their heads making brain synapses and begetting something, or
- Inanimate objects: With a cave as a shelter or a first attempt at cultural evolution with its ancient pictographic art.

²¹ *"Conversion: A process in which a participant, the Relay, is the Goal of one action and the Actor of another. This involves a change of state in the participant."* (Kress & Van Leeuwen, 2006: 75)

²² *"Unstructured analytical process An unordered set of participants ('Possessive Attributes') is interpreted as the set of parts of a whole which itself is not represented."* (Kress & Van Leeuwen, 2006: 104)

In Ancient Greek grammatical classification, the feminine genders utilize the letter ‘eta’ as the definite article of singular, for example, “Ἡ Ἀΐΐῃ” (*hē gunē*: the woman, the female). In the 3x9 dimension table of the 27 letters (Smith, 1958: 52), the letter eta occupies the eighth position, has a numerical value of 8, and is the ‘Superordinate,’ while ‘omega’ in the same column has the value 800 and is the ‘Subordinate.’ This relationship, according to the ancient Greek alphabetic numerals (base-10 metric system), can be analyzed as 8*100 (eight times one hundred) or in their numerical system as ‘ἩΡ’ (‘eta’ times ‘rho’) as Ifrah (2000: 246) notes.

Table of the 27 Greek letters arranged in a 3x9 dimension format (Smith, 1958: 52, Ifrah, 2000: 220-221)										
Columns		1	2	3	4	5	6	7	8	9
1st row	Ancient	Α	Β	Γ	Δ	Ε	Ϝ	Ι	Θ	⊕
	Numeric Value	1	2	3	4	5	6	7	8	9
2nd row	Ancient	Ι	Κ	Λ	Μ	Ν	Ξ	Ο	Π	Ϟ
	Numeric Value	10	20	30	40	50	60	70	80	90
3rd row	Ancient	Ρ	Ξ	Τ	Υ	Φ	Χ	Ψ	Ω	Ϸ
	Numeric Value	100	200	300	400	500	600	700	800	900

Consequently, they share the common attribute of being in the same column. In a *conventional* system of *onomatopoeia*, their positions can be interchanged for euphony and correspond with more meanings, thus creating a “*Network*”²³ of *meanings* in different levels “*with the multiple interconnections between participants*” (Kress & Van Leeuwen, 2006: 84). Moreover, there is an implicit existence of “Θ” within “Ω” through numerical operations and correlations from the table of 27 letters.

This complex analysis, which involves the interplay of *language*, *symbolism*, and *numerical systems*, challenges our understanding of ancient Greek culture and thought and underscores the immense challenges in interpreting some ancient words with different levels of the ancient polymath realm of realms. Consequently, ‘omega’ exists either expressly or implicitly within the roots of the ancient words

- · ΜΘΤ-· (mētēr, noun: mother, uterus, source or origin; in modern Greek ΜΗΤ-),
- · ΙΩ-· (zōon, noun: animal or zōē, noun: life; in modern Greek, ‘ΖΩ-’),
- · ΣΓΘΛ-· (spēlaion, noun: cave; in modern Greek, ‘ΣΠΗΛ-’).

²³ “*Networks* illustrate the multiple interconnections between participants, where any participant (‘node’) can serve as an entry-point for exploring its environment. The connections (‘links’) between these nodes can have various values, such as signification (‘a means b’), combination (‘a goes with b’), or composition (‘a contains b’). The essence of these links is that they represent proximity or association between participants. Unlike taxonomies or flowcharts, networks reflect a more decentralized and interconnected structure, often seen as reflecting contemporary social fragmentation and regionalization.”

Further analysis of the example, the root ‘ΣΠΗΛ-’ is numerically analyzed as

- “Σ” = 100,
- “Π” = 80 [= 8*10 = “Η” (Ifrah, 2000: 246)],
- “Λ” = 8, and
- “-” = 30.

The ancient word “ΣΠΗΛΑΙΟΝ” (spêlaion, noun: cave; in modern Greek ‘ΣΠΗΛΑΙΟ’) is mentioned in Plato’s “*The Republic*,” 7, 514a, and is in an object of an *allegory*. When people exit Plato’s Cave in “*The Republic*,” they move from ignorance (a dark place) into the sunlight of understanding, as happens with a newborn infant.

The analysis issue becomes even more complex and challenging due to the lack of historical data concerning numerical systems in that era. Considering the analysis of monumental architecture, our knowledge about ancient civilizations remains limited. The first and most significant problem is that the number of letters does not remain constant over the centuries but is variable.

At this point, the shape of the omega, “8,” provides an answer. The ‘eta’ was written as a rectangle divided into two squares, as “Η.” Essentially, the two circles of omega, “8,” arise from the centers of the squares of ‘eta,’ “Η.” Such an analysis would be paradoxical to dispute because, from the 8th century B.C., the level of *Arts* and *Architecture* was already high, reaching its peak with the construction of the Parthenon. In light of this, it seems unlikely that ancient scholars and polymaths would not have considered such a minimal representation of two letters.

In line with what has been discussed above, a **diagram** (Fig. 12) for the verb “ΦΥΩ” (phúō), is provided whose **visual conclusions** the reader could interpret in accordance with the Greek language or comprehend the nuance of meaning through parallel English signifying words. **By arranging the three letters in a particular manner**, the reader can gain a deeper insight into the verb’s meaning and will automatically **develop mnemonic visual rules**. It could be beneficial if those *graphemes* were placed mentally to the abstract bodily shapes of the *Dipylon Amphora*, a large Ancient Greek painted vase, to explore and find out more *meanings* based on the reader’s creativity and correlate them with the sense or the idea of flowering. **The reconstructed word vertically illustrates the fundamental principles of the flora development process**. It is materialized as a *symbolic drawing*, which seems like an *abstract cave painting*, “directing itself toward the real, shows us the true nature of the object” (Lacan, 1998: 95) that a subject could refer to, such as a tree or flower. “*It seems to give us the basis (support) of being*” (Lacan, 1998: 95). Thus, it has an “unstructured” *topology accuracy*, while the *syntagma* indicates an *unstructured analytical process*. The ‘Carrier’ is implied; it can be comprehended based on the creativity of the subject. The three ‘*Possessive Attributes*’ “are not drawn to scale, but the way they are interconnected is drawn accurately” (Kress & Van Leeuwen, 2006 1996: 104). It can be apprehended based on the possible synapses of the subject brain. In Fig. 12, it is displayed the verb ‘φύω’ (phúō) in the classification of the flora’s cosmos and the human body instances as ‘*Interordinates*,’ the drawings are identified as ‘*Subordinates*’ in the ‘*Multi-levelled overt taxonomy*.’ This procedure generates a **tree-structure connotative semiotic** with different levels of *visual meanings* that exist in the *meanings* at *syntactic structures*²⁴ of the *English language* as both a specific

²⁴ A *syntactic structure* refers to the specific usage of this verb within a sentence.

meaning (semantic value) referring to *physical conditions* (par example, *a seed of a bean plant grows in the yard*) and related words referring to *content planes* (par example, *an idea of inspiration grows in mind*). The *lexeme*²⁵ “ΦΥΩ” (phúō) (n.d.: Wiktionary) is presented the following semantic categories in the *English language*:

- (transitive) to bring forth, produce, generate, cause to grow
- (transitive) to beget, bear, give birth to
- (intransitive) to grow, arise, spring up
- (intransitive, present tense) to become [+adjective]
- (intransitive, aorist and perfect)
- (copulative) to be by nature [+adjective]
- (intransitive) to be naturally disposed to, prone [+infinitive – to do]
- (impersonal) It is natural, happens naturally [+infinitive – that ...]
- to be one's natural lot [+dative – someone's]

Notably, Empedocles created a myth for the first birth of humans: “D. 157 3. *Hear this. For my tale is not aimless nor ignorant. First, complete [or: rough] outlines sprang up (‘ΦΥ-’ as the Greek root of the verb: “οὐλο-ΦΥ-εῖς”) from the earth 5. Possessing a share of both, of water as of heat. These fire sent upward, wishing to reach what was similar to it; As yet they displayed neither the lovely framework of limbs Nor the voice and the organ that is native to men.*” (Diogenes Laertius, 2016: 500-503).

²⁵ A *lexeme* represents the unitary meaning of a group of words and their shared *syntactic properties*. (Andreou, 2019)

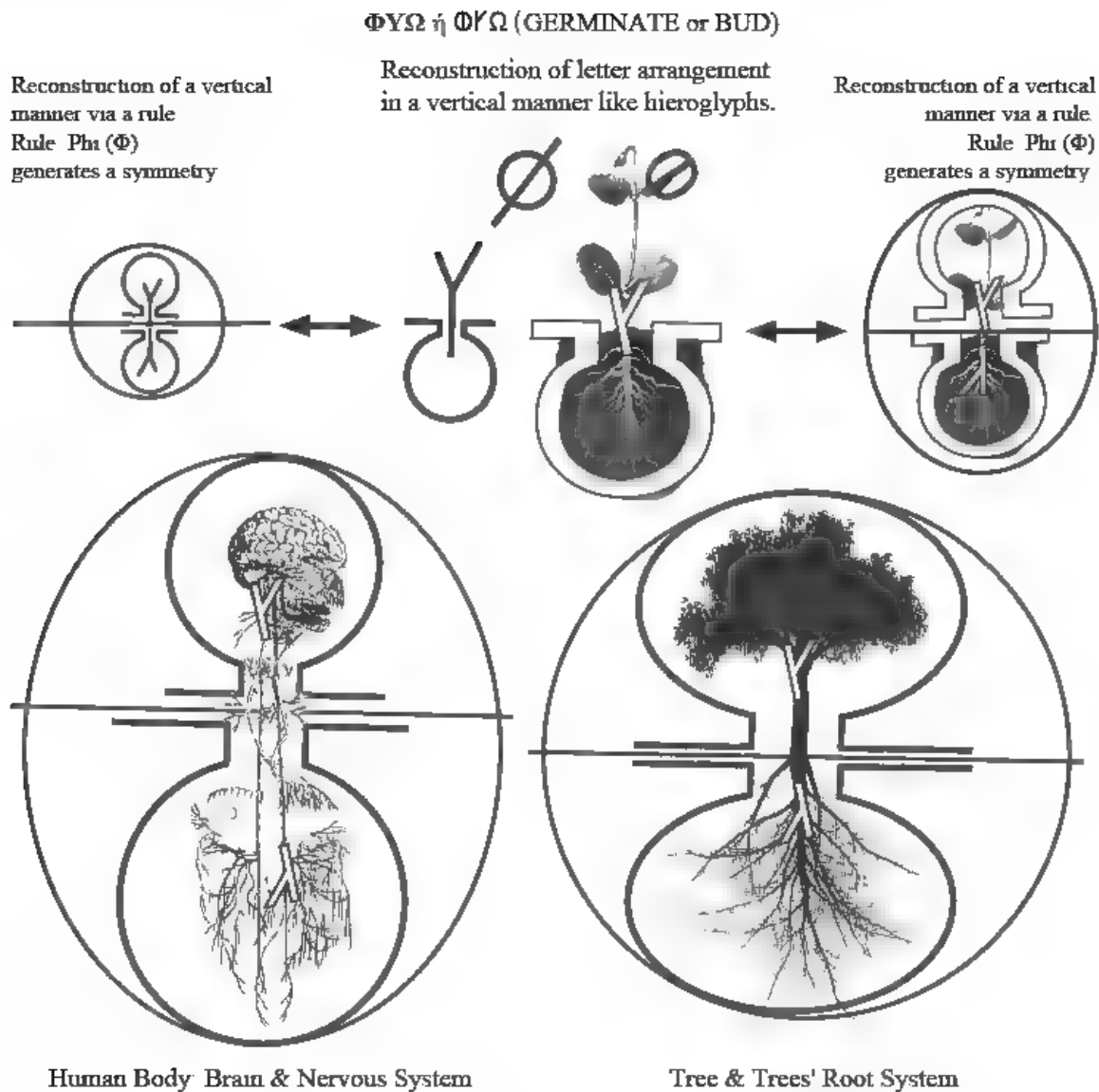
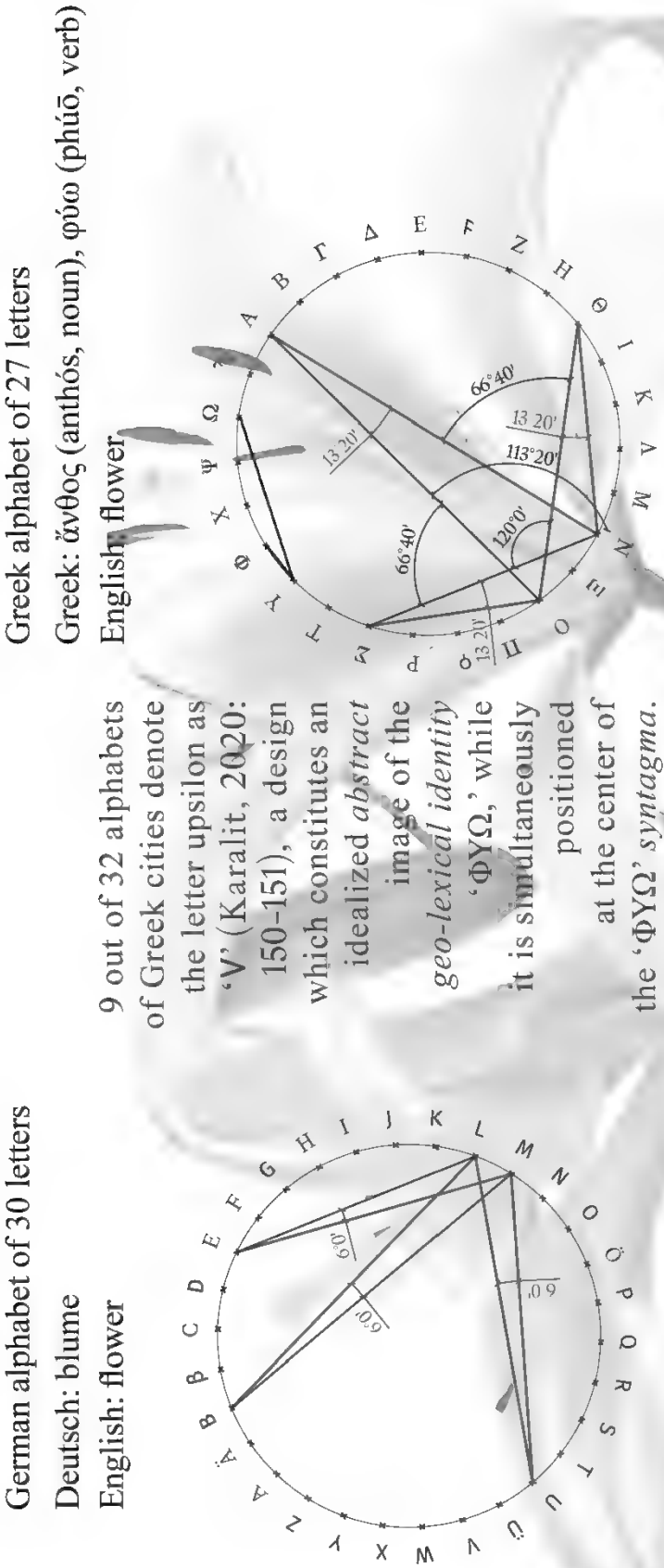


Figure 12. The lowest visual modality of the Event of growth. Composition of the graphemes' positions of the verb "ΦΥΩ" according to their classification. [Composition by P Petrakis The images below (without the graphemes' positions) are created from the Instagram profile @weareneutral.]



9 out of 32 alphabets of Greek cities denote the letter upsilon as ‘V’ (Karalit, 2020: 150-151), a design which constitutes an idealized *abstract* image of the *geo-lexical identity* ‘ΦΥΩ,’ while it is simultaneously positioned at the center of the ‘ΦΥΩ’ syntagma.

Figure 13. Design observation of the meaning of the geo-lexical identities compared to the three-dimensional design of the flower blossom. [Composition by P. Petrakis]

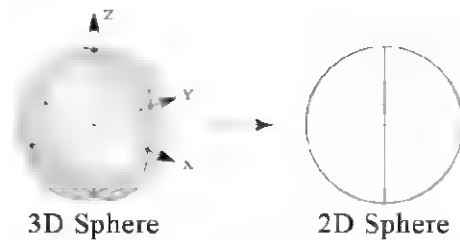


Figure 14. Sphere drawing.

Another example consists of a **circle with a cross**. Geometry signifies the two-dimensional design of a sphere, while the Attic alphabet denotes the letter “⊕” or “⊙.”

In Pre-Socratic doctrines, the sphere is associated with “the concepts of God (theós, ‘ΘΕΟΣ’ and the Whole (hólon, ‘ΟΛΟΝ’),” as mentioned by Xenophanes, Parmenides, Empedocles, Leucippus, Democritus, and Musaeus (Diels, 1903: 44, 144, 171, 247, 254, 290, 361, 496). They all agree that GOD (ΘΕΟΣ) is the Creator and “omnipresent.” Therefore, anything within the sphere or circle is a “subset” of God and the Whole, and the sphere is a Peircian symbol.

In the syntagmatic type ‘ΘΕΟΣ,’ which as a noun is in the first singular number, 50% of the graphemes constitute this word with two circles (in the 1st & the 3rd position) and represent the sound sequence of a conception, the supreme and transcendent theoretical entity. Noteworthy, as lexical morpheme (theo-): ‘ΘΕΟ-,’ 66.6% of the letters constitute this word with two circles. Furthermore, the “choice” of the circle is found in some different language families (and consequently languages) across continents with a focus on Western culture. (Fig. 16) As a remark, it is not considered impossible, either by luck or by desire, for some civilizations to choose something corresponding since it can be philosophically and semiotically connected to the idea of the infinite and the concept of divinity.

Since the letter “Ε” derived from Egypt (Diringer, 1953: 199) (Fig.1), serves as a simplified design of the human body topology. The three parallel ‘Vectors’ (‘Possessive Attributes’) unite in an inclusive analytical process (Kress & Van Leeuwen, 2006: 95-96) and connote the three fundamental elements (head-trunk-lower limbs) of the ‘Carrier’ (body), enlightening us about the architectural and anatomical concepts linked to the grapheme “Ε” (Fig. 15).

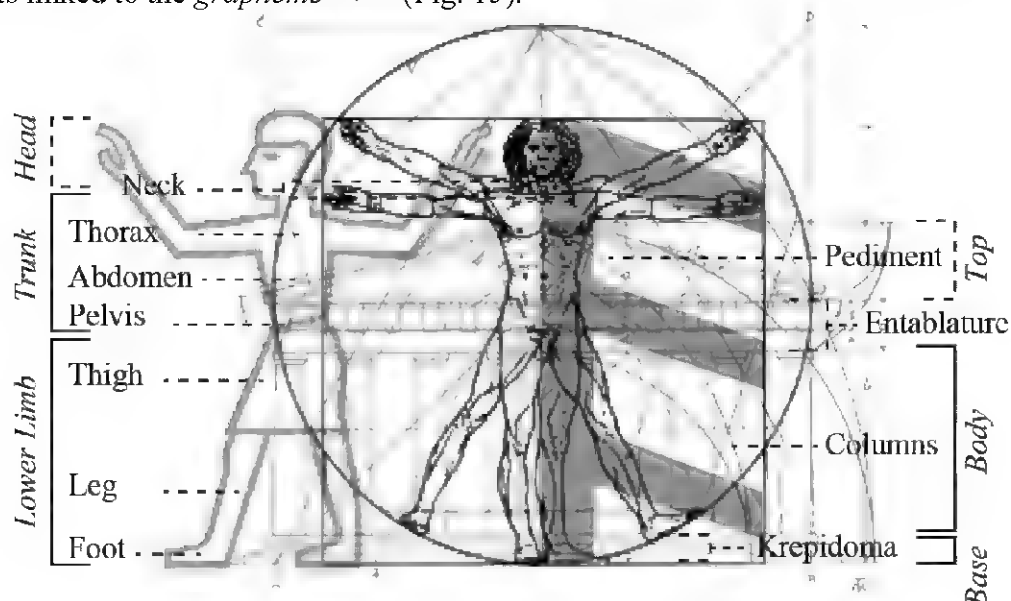


Figure 15. The Vitruvian Man by Leonardo da Vinci with the Epsilon grapheme, the hieroglyphic (on the left) from the evolution of writing, and the analysis drawing of the Parthenon facade by Lund (1921: 171), which appears as a geometric pattern.
[Combination of drawings by P. Petrakis]

Language presentation format:

Language Family

Branch:

Member/Language = [Syntagmatic
Term]

Indo-European

Greek:

Homeric to Demotic – [ΘΕΟΣ]

Romance: Spanish = [DIOS],
Italian = [DIO]

German: English = [GOD],
Deutsch = [GOTT],
Icelandic = [goð]

Slavic: Bulgarian = [Бог],

Croatian = [Bog],

Ukrainian = [Бог],

Polish = [Bóg], Russian = [Бог]

Serbian – [Бог], Slovak – [Boh],

Czech – [Bůh],

Celtic: Breton – [Douc]

Indo-Iranian: Tajik – [худо],

Tatar – [ходай],

Sanskrit = [देवता]

Afro-Asiatic

Semitic: Arabic = [الله]

Altaic

Korean: Korean = [하느님]

Turkish: Tatar = [ходай]

Kartvelic

Georgian = [ღმერთი]

Dené–Yeniseian (Athabaskan)

Apachean:

Navajo – [Diyin Ayóo Át'éii]

Austroasiatic

Mon-Khmer: Khmer = [ព្រះ]

Trans–New Guinea

Ama (Papua New Guinea) = [noko]

Austronesian

Filipino: Tagalog – [Diyos]

Dravidian

Kannada = [ದೇವರು]

Malayalam = [ദൈവം]

Tamil = [கடவுள்]

Telugu = [దేవుడు]

Sino-Tibetan

Burmese = [နတ်] (spirit),

[ဘုရားသခင်] (deity)

Niger-Congo

Nguni: Zulu = [inkosi]

Nilo-Saharan

Tadaksahak – [e'ɣɛŋ koi]


Nuer – [Kōth]

Mundurukú = [Karosakaybu]


Language isolate






Basque = [jainkoa]




Figure 16. The syntagmatic term of God in Language Families, Branches, and Members across continents. Identification of examples of the circle's graphemes. Translation from: Glosbe [Online Dictionary]

Similarly, the *abstract figure* “” belongs to Kress & Van Leeuwen’s (2006: 104) *concept classification*, which is called **topological accuracy**. In this analytical process, both the ‘*Carrier*’ and the ‘*Possessive Attributes*’ are not drawn to scale, but **their interconnection is accurately depicted**. If the *grapheme* is placed on Vitruvius’ man [3.1.2], the three diagonal lines imply the *architectural design principles* of Greek temples:

- *Top or Crown,*
- *Body or Shaft, and*
- *Base or Foundation,*

while the vertical line (in Egyptian numbering: $1 - 1$)²⁶ implies the *geometrical pattern* as a unit grounded in the earth *base*. (Fig. 15) Because this *pattern* in an ancient *taxonomy* is found in many living organisms and temples, it is posited as a **symbolic property** and can contemplatively be “generalized” as the cornerstone of existence within a conceptual representation. The *grapheme* “” would be displayed in **multi-levelled overt taxonomy**, although it is worth mentioning that there are some blank positions in the *intermediate levels* that are waiting patiently to be compiled. (Kress & Van Leeuwen, 2006: 95-96)

In the continuation of the analysis of another *grapheme*, the ‘sigma,’ (‘’ or ‘’) represents the *concept* of *motion over time*, described by a *wave function*, while it connotes a *vortex* with the *lowest optical modality* or shapes correlated with this fundamental 2D shape. It is just three or four single diagonal lines, as three main parts of the façade of a vortex in straight lines. In this *grapheme*, the dynamics of *actions* and *shapes* could translate into a static drawing *concept* that organizes a **multi-levelled overt taxonomy**. Another instance, the letter sigma, ‘’, when positioned in the plans of radial cities (or rivers, as stated by Heraclitus, “all things flow and nothing abides”), implies the trace of continuous movement, while as a ‘*Vector*’ and ‘*Actor*,’ it represents an **unstructured analytical processes**. Additionally, the *shape* ‘’ is found in nature, in parts of lightning (which carry enormous electrical sparks) and veins (which continuously carry blood) or neurons²⁷ (which transmits information throughout the body). Therefore, the ‘’ encodes the movement of elements with the *lowest visual or naturalistic modality*.

Rogers (2004: 110) notes that the *hieroglyphic*: ‘’ symbolizes the sun and light, while the hieroglyphic: ‘’ signifies the city or village. *In the realm of the design semiosphere*, it has a straight *pictographic reference* to radial cities after reducing the number of lines to a *minimum model*. The ‘’ is a *connotative level* for the settlement, as it symbolizes a “bounded area,” and the two *vectors* represent the radial roads with a reference point (Sarigiannis, 1985: 54-55). It has a **topological accuracy**; the circle is the ‘*Carrier*’-city, and the diagonal lines are the ‘*Possessive Attributes*’-the roads; therefore, it contains a strong link for the designers. As a former *iconic sign*, its *meaning* degrades and, now, as *alphabetical*, it is *transformed* into a circle. Thus, it *symbolizes* an “accumulation” of elements, when it is utilized by some terms, such as:



- π-Ο-λις (pólis, city; community),
- Ο-ικέω (oikéō, to inhabit; to colonize; to dwell),

²⁶ In the dialogue of ‘*Critias*,’ Plato noted the nexus between Greece and Egypt. Their metric system has many similarities because of the continuous centuries-old cultural contacts.

²⁷ Neurons: (in animals and people) a type of cell that sends and receives messages within the brain and the nerves of the body (Cambridge University Press & Assessment, 2024)

- χ-8-ρΟς (chóros, area; field) and
- Ο-λ-Ο-ν (ólon, whole, entire; absolute, utter generally).

Noting that the three letters: '⊕, ⊙, ⊗' refer equivalently to 'theta,' except for the Thierian or Kyrenian '⊙,' which denote the 'omega.'

In the *graphic representation* of the 'ΟΘΘΑΛΜΟΣ' (ofthalmós, eye), the circle is located four times, while the corresponding part of the *syntagmatic term* aligns with the chronology (century 800 B.C.) of the *alphabet's* establishment (Beekes, 2014: 100). Simultaneously, in the *hieroglyphics*  (=eye) and  (=κόρη) (Gardiner, 1957: 450-451) the 'omicron' is assessed as part of them. (Fig. 6)

Hence, it is effortlessly concluded that reading the *graphemes* of the hypothetical entity of the term 'ΘΕΟΣ,' conveys the **fundamental design laws of existence** (for instance, everything would be designed in the circle), **begetting a causal link between reality and the transcendental**. Additionally, each *grapheme* (as an overarching 'Participant') of the *syntagma* organizes a **multi-levelled overt taxonomy**, which can now feed philosophical thought processes by constructing, for instance, **tree-structure** diagrams of *narratives* and *concepts*.

It is intriguing to note the unusual behavior of some *syntagmas*; plotting their *graphemes* as points on the circle circumference. To justify this method, it is quoted a passage from Aristotle's (1957 1936) *On the Soul*, which mentions that:

407a[6-26]: "But the unity of these is one of succession, like that of numbers, whereas the unity of spatial magnitudes is not. So also the mind is not continuous in this sense, but it either has no parts, or at any rate is not continuous as a magnitude. For, if it is a magnitude, how can it think? With any one of its parts indifferently? The parts must be regarded either as magnitudes or as points, if one can call a point a part. In the latter case, since the points are infinite in number, the mind can obviously never exhaust them; in the former, it will think the same thoughts very many or an infinite number of times. But it is clear that it is also capable of thinking a thought once only. (2) If it is sufficient for it to touch with any one of its parts, why should it move in a circle, or have magnitude at all? But if it can only think when its whole circle is in contact, what does the contact of its parts mean? (3) Again, how can it think that which has parts with that which has not, or that which has not with that which has? The mind must be identical with this circle; for the movement of the mind is thinking, and the movement of a circle is revolution. If then thinking is revolution, then the circle whose revolution is of this kind must be mind. But what can it be which mind always thinks?—as it must if the revolution is eternal. All practical thinking has limits (for it always has an object in view), and speculation is bounded like the verbal formulae which express it. Every such formula is a definition or a demonstration."

Since the *letters* are derived by unknown minds (designers or not), the following reasoning could be constructed: The *alphabetical graphemes* have a finite number, a beginning, and an end. Each new repetition expresses a peripheral movement, a period, which a circle represents. This algorithm underscores the **symbolic minimal representation** of the period in a refined **abstract connotative level** of the finite nature of *alphabetical graphemes*.

In agreement, the book '*Sefer Yetzirah*,' literally the '*Book of Creation/Formation*' (Unknown Rabbi, 1997: 108), concerns the teachings of *Jewish mysticism*. Based on the book's premise, **numbers and letters are fundamental elements of the world's creation**, and the existence of the "sphere" or "circle" ("Galgal") defines the variety of things. The editor and translator, Rabbi Aryeh Kaplan, translates the following passage:

"2:4 *These twenty-two letters, which are the foundation of all things, He arranged as upon a sphere with two hundred and thirty-one gates, and the sphere may be rotated forward or backward, whether for good or for evil; from the good comes true pleasure, from evil nought but torment.*"

Then, the commentator Kaplan (1997: 109-111) analyzes and offers the *geometrical interpretation* that 231 corresponds to 22 Hebrew letters placed on 231 circle lines since the quote is mathematical. He documents his position by providing diagrams and a mathematical formula as follows:

If several points are placed in a circle, the number of possible connecting lines is calculated by the formula:

$L = n*(n-1) / 2$, where L is the number of lines and
n is the number of points.

Therefore, $L = 22*(22-1) / 2 = 231$.

It is noteworthy that the *Babylonian Talmud* dedicates only a few verses that urge the study of *Sefer Yetzirah*, stating:

"65b.18. *The Gemara mentions another fact that documents the statement that the righteous could create a world if they so desired: Rav Hanina and Rav Oshaya would sit every Sabbath eve and engage in the study of Sefer Yetzirah.*"

Kress Leeuwen (2010: 54-57) notes that the circle was a tool for the search for truth and mysticism. Additionally, the *commentator*, Spanish Jewish philosopher, physician, and poet Judah Halevi, in his work, *Kuzari* ('*Book of Refutation and Proof on Behalf of the Despised Religion*,' also known as the '*Book of the Khazar*'), treated it as a treatise on mathematical and linguistic theory (Halevi, 1905, Essay 4:25.)

The *Sinaitic Theory* (Diringer, 1953: 199-202) documents the intercultural borrowings of the *graphemes*. However, the '*Sefer Yetzirah*' was not placed before the *Hellenistic times* (Reitzenstein, 1904: 191), which raises the question of when an oral tradition is recorded. Has this *Unknown Rabbin* chronicled an oral tradition, or not?

In accordance, a similar illustration is discovered in Arab culture. The grimoire, '*Shams al-Ma'arif*,' literally '*the Book of the Sun of Gnosis and the Subtleties of Elevated Things*' (Al-Buni, 1345: 10-20), provides texts of magic and inner spiritual knowledge (Maddison et al., 1997: 65). On one of its pages (Fig. 17), a design of concentric circles with *isolated graphemes* on the outer second ring is presented and contributes to the subject place for *interpretations*. The Arabs extensively studied Aristotle during the *Islamic Golden Age* (8th to 14th centuries), translating many of his works into Arabic. However, because of a lack of evidence, it is unclear if this drawing draws inspiration from occult philosophical tradition, which Aristotle mentions in *Metaphysics*, or a thought reasoning based on Aristotle's *On the Soul*.



Figure 17. Drawing of Arabic graphemes in the concentric circles of an occult treatise. Arabic Grimoire, Shams al-Ma'arif, 13th century AD, Algeria. (Al-Buni, 1345)

Regarding ancient times, Lagopoulos (1989, October 26-29: 113) outlines that, at least since the *Mycenaean period*, **the circle has had cosmological meaning and significance**, whereas *political-cosmological systems* idealize its shape and impose it on the spatial organization of *design* as a result. At the same time, in Art, the *proto-geometric period* (1050-900 BC) outlines the emergence of a non-representational artistic painting style that evolves into schematic naturalism (ibid: 85, 96-98). Also, on the *Dipylon Amphora* (760-750 BC), a significant ancient Greek funerary vessel, **the human torso, as a Peircean object, is interpreted with an elongated trapezoid, which mentally (geometrically) corresponds to a triangular shape.** (Fig. 11)

For the artist, the two shapes are *interpretative states of existence* in a *connotative abstract level*. Delving into the circles 24-27-28, at the *syntagma* 'THEOS' corresponding shapes emerge in the "*geo-lexical identity*" (in Greek "*γεωλεξτική ταυτότητα*") as *onomatopoeia* products of my *analysis*.

Formation of the Greek word of 'God' ('ΘΕΟΣ': theós)

Greek Alphabets

24 Letters

'ΘΕΟΣ'

27 Letters

ΘΕΟΣ

28 Letters

ΘΕΟΣ

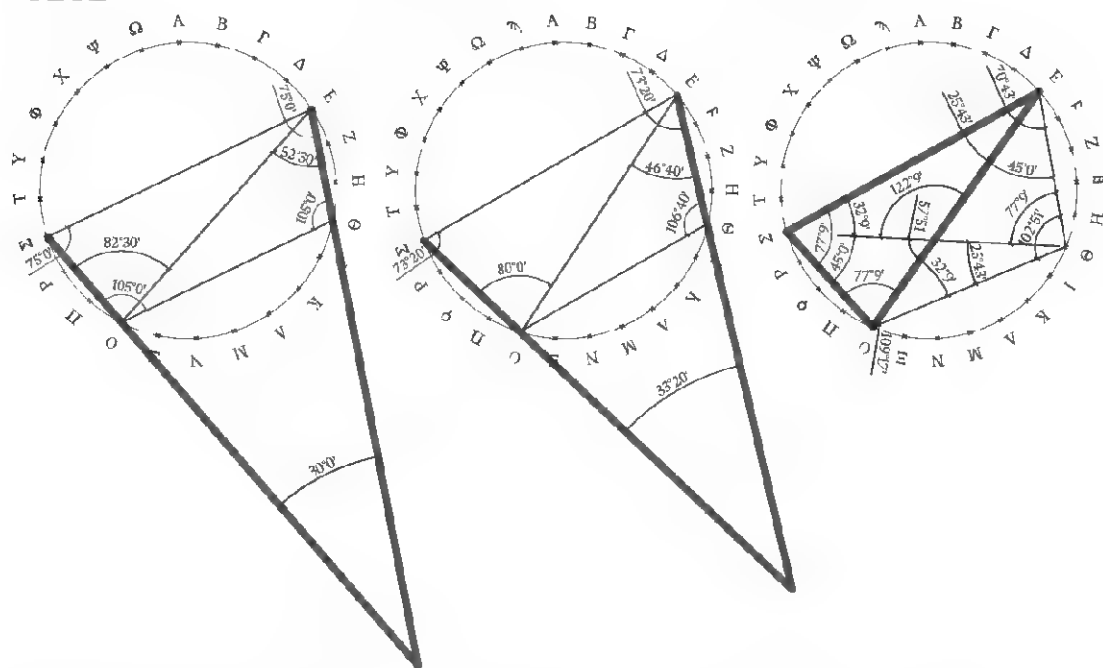


Figure 18. Geo-lexical identities of the God syntagma [Drawing proposal by P. Petrakis]

As a mechanism, the circle can beget a typical "tacit" system capable of *solidifying the syntagmatic structure of the graphic form* over the ages. I call this **design metalanguage** 'geo-dorwid' since it occurs in a high level of abstraction; the *syntagma* is the 'geo-lexical identity' determined in the circle. The 'geo-lexical identity' refers to a *semiotic system* formed and represented by the circle. Its design is a *polygonal chain* with at least one *meaning*; the first and last *grapheme* are dot-units that structure a *syntagma*, producing a simple, convex, non-convex, self-intersecting, or closed *polygonal chain*. It is noteworthy that the possibilities are left open for another type of the 'geo-lexical identity' to have a basis on another geometric pattern, for instance, a square or a triangle, but the research does not proceed with further examination.

Historically, **writing has been a fundamental tool for presenting and highlighting the prevailing worldview** (Andreou, 2020: 193). *Language*, as adopted

by the social body, is distinguished in social stratification (Saussure, 2011: 9, 15-16). Every level has its unique perspective. *This could be* ascertained in a group of farmers and priests. They utilize *speech (langage)* to express different levels of *meaning*; farmers organize *syntagmas* for their land, and priests organize *syntagmas* for divinity; the first group commonly has a primary education, and the second one is usually expertise in a field of *science*. *In ancient times*, it was common for the priesthoods to define, acknowledge, and compose the *writing* of a *Language* (Karali, 2020: 192). Scholarly polymaths or poly-scientists exchange knowledge among the priesthoods, which enables the exchange of scholarly poly-scientists. After this, a certain amount of knowledge is transcribed into architectural works in addition to theoretical views perspectives on the nature of reality, while numbers as symbols are the pillars of reality (Lagopoulos, 1989, October 26-29: 112).

It is worth noting that there is **an analogy between the positions of the Pre-Socratic doctrines and the “geo-lexical identity.”** Pythagoreans state that small *particles* constitute the *soul* (Aristotle, *Metaphysics*, 404a[18-26]); according to Democritus, *atoms* in the universe (*void*) collide and combine to form the visible world (Diels, 1903: 368, 380, 389-390, 406). Analogically, a refined procedure to enclose this reasoning in *Language* is to locate the primary and most minor *component elements* (the *graphemes*) and *mimic* the motion of these “infinitesimal” particles— or just dots or points — in the world in a sophisticated *design semiosphere* that generates a silent nexus between the *cosmological system* and the *Language*. That is, it becomes reason from the transition from the world of philosophy to the world of language, philosophizing and with analogical thinking that some polymaths take to onomatopoeia among a series of reasonings.

As discussed, **the circle is described as superior because of its relationship with the divine nature.** Its role in forming the visible world is a testament to its powerful *symbolism*. The circle, as a mechanism, materializes mental constructions, recreating the universe in its or somebody would identify proportions and analogies (Fig. 15). The points on the circumference of a circle are the primary prerequisite to reconstructing everything, making it a powerful mechanism to interpret reality and enlighten our knowledge. It is a “force” that shapes our perception of the world.

The circle encapsulates a complex endeavor to transform transmute certain words into *abstract patterns* that reference *extra-linguistic* reality through intricate correlations: *mathematics* and *philosophy*. These correlations delve into principles beyond *Language* but are often *articulated* through it, stimulating an intellectual desire for exploring.

In *Greek Literature*, the reasoning of transmutation is located in *Thales of Miletus* (c. 626 623 - 548 545 B.C.), who claimed *all the diverse encountering substances are metamorphoses from a single elemental matter — water* (ΨΔΩΡ). (Principe, 2013: p.14, 61). Earlier in Hesiod’s poem *Theogony*, the fundamental elements gradually transformed through birth into matter. **Aligning with the transmutation process of Greek myths, the processes—of corresponding some syntagmas (words) and 2D forms—are given stress syntagma change as a guide to progress—from sound to geometry and, in turn to graphemes to shape into a circle.** The sequence was associated with the change from a chaotic and undefined *prima materia* (Dictionary of the History of Ideas, 2006) to tangible ideal forms that shape the universe. In Plato’s *Timaeus*, 54a-57d, the well-known platonic solids (century 427 - 348 B.C.), which are derived from Pythagoras (century 570 - 495 BC) (Diels, 1903: 247; Proclus: Commentary on Plato’s *Timaeus*), are the five basic solids constitute the physical world.

In addition, Pythagoras presents that *numbers* are not simply *abstract mathematical entities* but *elemental principles* that underlie the universe's structure in more detail. Proclus (2007) mentions that:

The Characters 16.3–22: “Pythagoras, for instance, when asked what is the wisest being of all, said, “Number”. What is second in wisdom? “He that puts the names to things.” 30 By “Number” he hinted at the intelligible order encompassing the multitude of the intellectual Forms. 31 For there the Number that exists primarily and authentically 32 was instituted after the superessential One itself. This Number also conducts the measures of essence for all that exists, and in it real Wisdom and Knowledge exist, since this Wisdom exists of itself, has turned back to itself and perfects itself. 33 Moreover, just as intelligible, intellect and intellection are the same in the intelligible order, so too Number and Wisdom are there the same. 34 By “He that puts the names” Pythagoras hinted at the Soul which was instituted from Intellect. The objects themselves do not exist as Intellect does in its primary way, but it contains their images and essential processional formulae like statues of the real entities, just as names imitate the intellectual Forms, that is, the Numbers. 35 The being of all things therefore comes from Intellect that knows itself and is wise, but naming from Soul that imitates Intellect. 36 The activity of naming, then, according to Pythagoras, belongs not to any random individual but to one who sees the Intellect and the nature of the real entities. 37 Names are therefore natural.”

Pythagoras's emphasis on the significance of the *Number* is a key point. Therefore, the Greek term ‘*Number*’ in the circle will be thoroughly analyzed to uncover potential insights in this combination of his statement and his explanation of the concept of the *Number*.

Specifically, the term ‘NUMBER’ (‘ΑΡΙΘΜΟΣ,’ *arithmós*) undergoes a significant *transformation* within the circle. A subset of the 27 diverse graphemes are interconnected by a zigzag line, creating a coherent *narrative* and *conceptual representation*. This transformation results in at least one ***morphographic interpretant*** (as Peirce calls the signifier), extending its semantic reach (for instance, see Rogers (2010: 33) Chinese diagram of *phonetic* and *semantic extension*) and establishing it as an original ***abstract pictogram*** within a specialized *discourse*, possibly appealing to the scholarly or priestly community. (Fig. 19)

On *connotative levels*, when it is defined the *interpretants* of some partial shapes, the possibilities of the combination depend on whether it is ***Monosyllabic*** (shape to single a word or *meaning* (Rogers, 2010: 27, 74-75)) or ***Polysyllabic*** (at least two shapes to a single word or *meaning* (Rogers, 2010: 69)) ***Word***. Because of the ***abstract nature of the shapes***, they would keep ***Multiple Meanings***, and some *shapes* organize a word or a *meaning* that is a compound (Rogers, 2010: 28); the *shapes* may not have specific *meanings* on their own but may be combined with other characters to confer specific meanings, “one part was used for its semantic value, and the other was utilized for its phonetic value” (Rogers, 2010: 34). In a ***connotative level*** of the ‘*Interordinates*’ and the ‘*Subordinates*’ branches, the *shapes* transformed and reconstructed partial *narratives* or just lexical items (meaning words) as *abstract pictograms* that would be employed in philosophical and religious realms; since, for instance, while you “read” them would be express underlying a worldview.

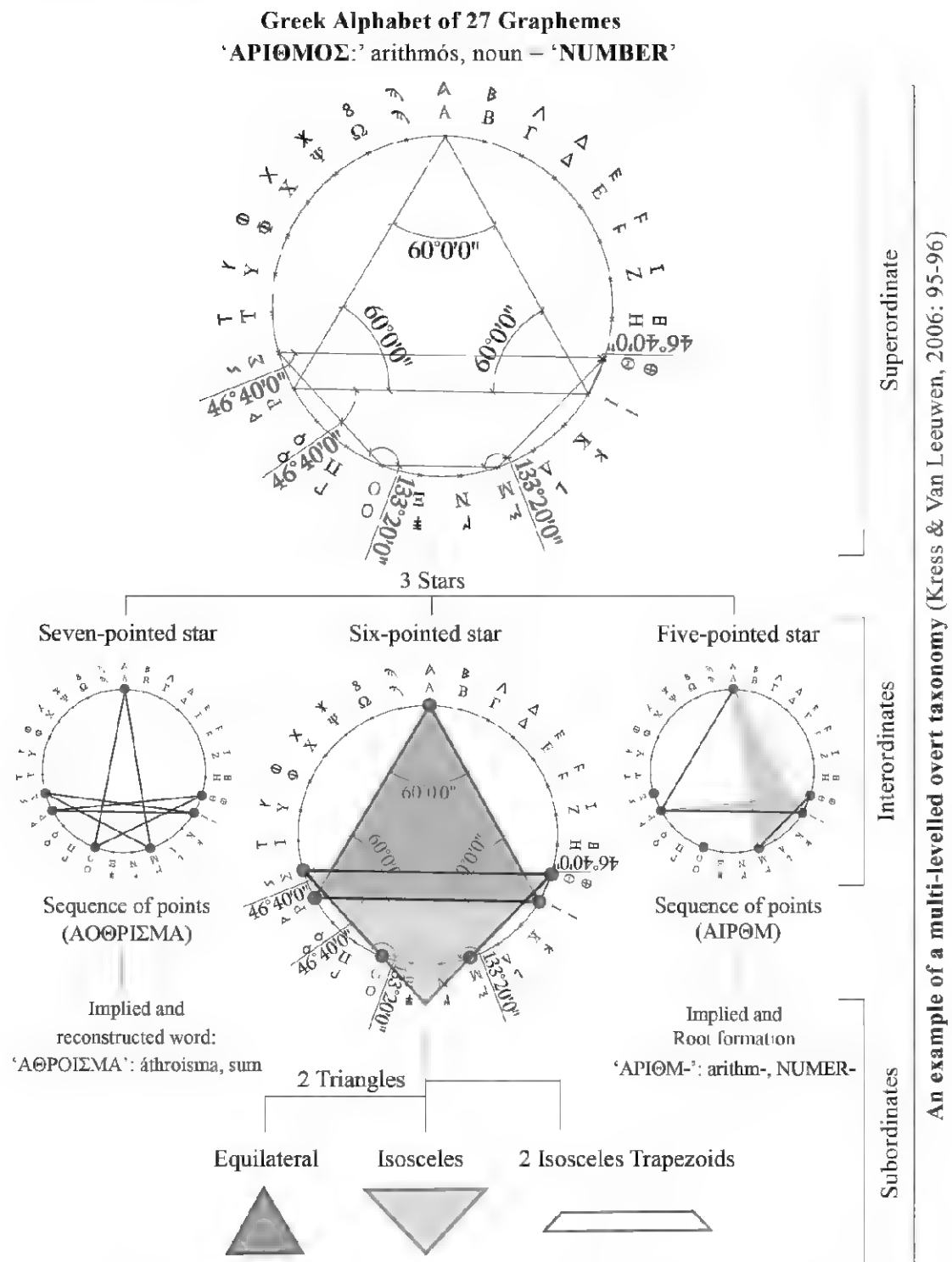


Figure 19. An example of a multi-levelled overt taxonomy of the syntagma 'APIΘMOΣ' or in English 'NUMBER.' (Design proposition of P. Petrakis)

The "geo-lexical identity" of 'NUMBER' is a rich tapestry encompassing abstract art's values. The geometrical structure *connotes* Pythagoras' explanation "in terms of 'Possessive Attributes,' highly abstract ones" (Kress Leeuwen, 2010: 90). **When schematically analyzed, it is revealed to form a multidimensional structure, embedding a multitude of concepts and narratives.** This complexity is intriguing, as it constitutes an *unstructured analytical process as a whole entity and a partial*

inclusion structure (*ibid.*: 96) if the circle is considered a ‘Carrier.’ Thus, in an **unlimited semiosis circuit**, the schematic isolations (‘*Possessive Attributes*’) illustrate the Pythagorean philosophical position on the fundamental nature of *Numbers* and their intrinsic quality. If we erase the resulting shapes from our reality, *Arts* and *Architecture* will be eliminated; our civilization will be a fluid and primitive state. The **shape addition of all the partial shapes** composes the **syntagmatic structure** of the **interpretant** and extracts a *circular semiotic code*. In the circle, the *design* is established at a *metalanguage level* as an **abstract pictogram** with **morphographic values**. The *graphic representation* of ‘NUMBER’ (— ‘ΑΡΙΘΜΟΣ, *arithmós*’) is specified as the logogram of a ‘silent’ “*meta-geo-symbolic sign*” and this research symbolizes it as ‘**M**.’

If this is an omission in linguistics, it is because the theoretical studies lack mathematical and design education, as the scientific fields are segmented. Additionally, the upper analyses may extend to cultures with commercial or military connections as polymath scientists moved through these networks. This hypothesis derives from ALPHA’s “*geo-lexical identities*” in 14 languages, where various isosceles and right triangles are observed. The triangles constitute essential design tools beyond endless mystical extensions. (Fig. 20)

In theological terms, GOD (— ‘ΘΕΟΣ’) is referred to as the “A-LPH-A” (— ‘Α-ΛΦ-Α’, as Greek and English term starts with the first *letter* of the *alphabet* and ends with the first) and O-MEG-A (as Greek term ‘Ω-MΕΓ-Α’ starts with the last *letter* of the alphabet of 24 letters²⁸ and ends with the first one), both in the *Book of Revelation* 22:13 (Biblica, 2011), which cites that:

“I am the Alpha and the Omega, the First and the Last, the Beginning and the End,”

and by Aristotle (1955: 408-409) in his theological and scientific treatise “*On the Cosmos*,” who cites Plato’s belief:

401b[24-27]: “[...] as the great Plato tells us: “God, as the ancient story says, holding the beginning and the end and the middle of all things that are, moves by a straight path in the course of nature, bringing them to fulfillment.”

Thus, the letter ‘ALPHA,’ in Greek mathematics holds the first position in the *alphabet* (numerical value 1), while in the circle, it is *signified* through “silent” associations of *geometry*, *arithmetic*, *theology*, and *philosophy*.

²⁸ “Hence Homer, imitating the number of the twenty-two books of the Jews, a number formed on the image of the twenty-two letters, himself organized his own poem of the *Iliad* in twenty-four rhapsodies, because of the twenty-four letters, and similarly for the *Odyssey*.” (Scholia Marciana, commentary on Dionysius Thrax, page 320, lines 17–30, edited by Hilgard, as cited in Ceccarelli, 2013: 361)

ALPHA geo-lexical identities of 14 different languages of 4 language families in their trees

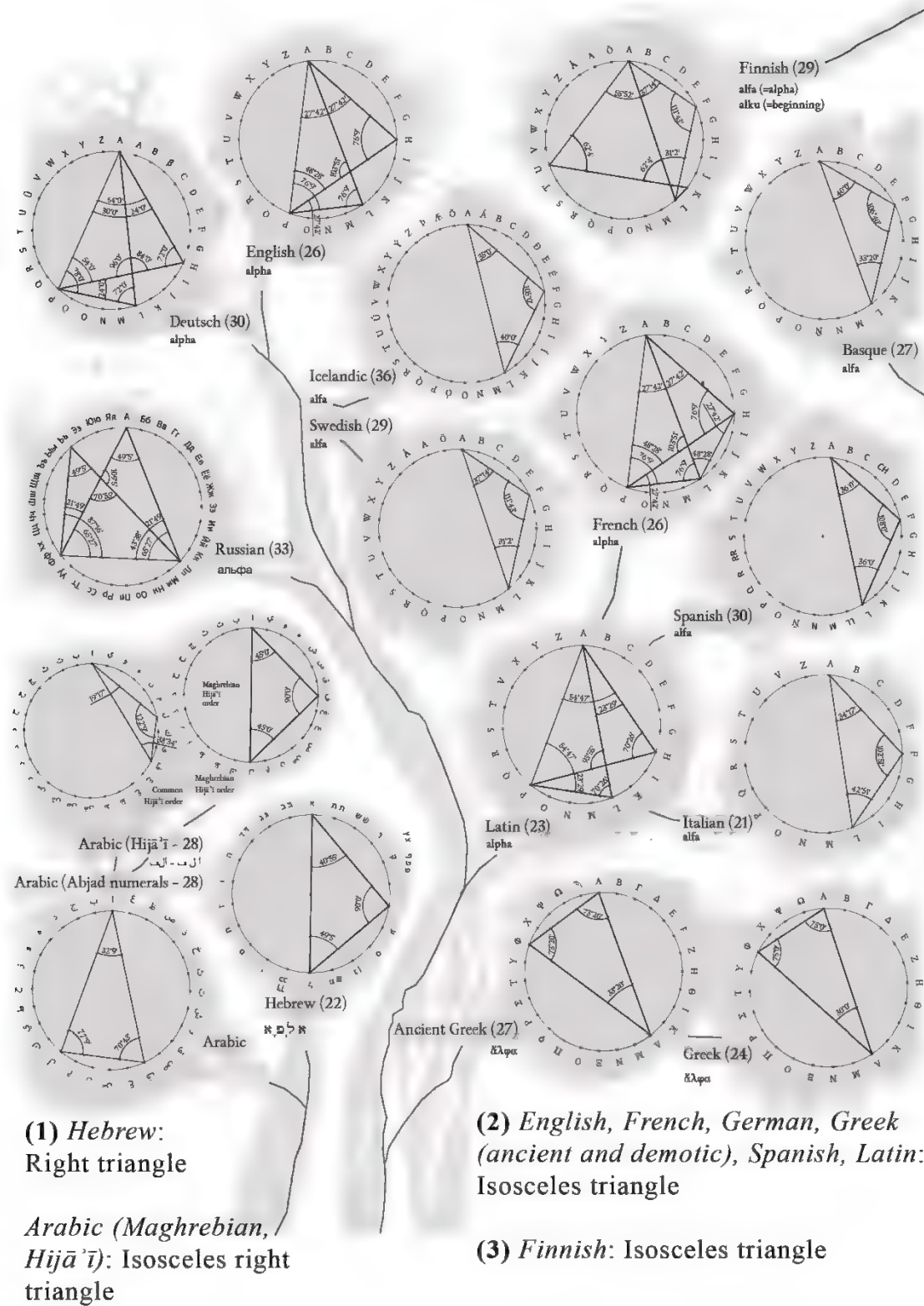


Figure 20. The geo-lexical identity ALPHA by selected alphabets and their Language Trees. Trees: Afro-Asiatic (left), Indo-European (right), Uralic (Finnish), Language isolate (Basque)
[Drawing proposal by P. Petrakis]

Conclusion

This research demonstrated that some graphemes could reveal a wealth of semiotic richness based on the multi-layered relationship of the different fields that constitute the cultural semiosphere of the Greeks in the 8th to 4th century B.C. By observing and analyzing the manner in which geometric patterns structured the visual aspect of some words, it is shared how language was not only an instrument for communication but also a reflection of the wider aesthetic and intellectual values and virtues of the society in which it designed.

Beyond their *phonetic value*, the *upper alphabetical letters* have a refined depth of *conceptual* and *narrative* extensions in the fields of *philosophy*, *theology*, and *music* and have become *cultural artifacts* that carry deeper meanings. These connections reflect how the ancient Greeks perceived the *tangible* or *invisible realms*, expressed ideas, and shaped their civilization within a combinatorial examination framework. For instance, the proportional harmony of *classical Greek architecture*, such as in the design of the *Parthenon*, mirrors the structured, balanced forms of Greek letters in the *syntagma* (word) of “ΦΥΩ” (phúō). In Fig. 12, the Greek word “ΦΥΩ” is reconstructed via an abstract and harmonical view, which reflects in an analogical way some *fundamental principles of nature*. In general, the parts of the temples mimic the development of nature, therefore, designers extract the *fundamental principles of nature* and relocate them in *Architecture* and *Arts*. This interplay between the Arts and *Writing* reflects the holistic nature of the Greek intellectual thought process in life, where disciplines were not understood in isolation but as complementary expressions of the same underlying principles of order and pulchritude.

The integration of *Semiotic Theory* from the perspectives of Peirce and Kress Leeuwen permits a deeper insight into how *graphemes* function as *symbols* ingrained with cultural influence. The research highlights the role of *abstract design* and *Geometry* in shaping these symbols, presenting that *Writing* was both an artistic expression form and a practical tool. The research proposed that *Writing* is a means of documentation and a cultural expression of philosophy, mathematics, identity, and artistic vision.

In this *semiosphere*, some *graphemes* and *syntagmas* are *algorithmic* products of *encoding* the spirit's *conceptions* in cosmological terms (which encompass fundamental questions regarding knowledge, reality, and existence) and scientific *concepts* of actual knowledge, presenting a complex backdrop of *meanings* worthy and relevant to the *Arts* and *Architecture*. By re-investigating new ways of how the script developed alongside advancements in *Arts*, *Architecture*, and *Philosophy*, it could better comprehend the paths in which language and cultural expression are inherently associated.

The exploration of *ancient languages*, not only *Greek*, through *Semiotics* is a *method* that highlights the rich *semantic heritage* of older civilizations and breathes new life into our understanding of human thought and communication. This process of rediscovery can inspire and invigorate students, scholars, and the public, reigniting their interest in the roots of every culture.

Interdisciplinary approaches, with their ability to enrich our understanding of how the ancients might have perceived, condensed, and depicted their world, are of immense value. They enhance the significance of our search for the roots of human knowledge over time and open new pathways for intellectual growth and learning. By

reexamining writing perception (Papadopoulou, 2001, September 28-30: 234-236), the uninitiated in the subject can enhance their neural networks (Dehaene and Cohen, 2007) and become capable of perceiving the finer nuances of some *concepts*. Following the aforementioned, it would also discover new models of learning Greek *orthography* through mnemonic visual rules (Genette, 1995: 116-117, 120).

Lastly, on a cultural basis, it would open new paths of creating a new language, the G-Language, as mentioned, with *interdisciplinary directions* constituting a *universal alphabet* (a loan term from Genette (1995: 118-119)). This extends the traditional linguistic boundaries and invites how future language may develop. According to my viewpoint, in the following centuries, Homo-Sapiens will follow the *natural selection* of the *evolution* of its species. If the above research has no scientific basis for the past and the scientific community cannot accept it, the research could be used as a basis to create a new language of a new human species, which I call *Homo-Cycreasol* with a *Universal Alphabet*. I utilized the term *Universal Alphabet* because I dream of the *Homo-Cycreasol* speaking a new universal language that is more sophisticated and refined than the existing languages. In light of this *Universal Alphabet*, language has likely evolved within more profound, more fundamental structural frameworks – structures that could inform future interdisciplinary and cross-cultural exchanges for the creation of new languages and communication systems. I dream of the G-Language as a child of **EROS** of *Mathematics*²⁹ and *Consciousness*.

What is **EROS**?

Ancient Greek term for **EROS**: 'ΕΡΩΣ'. The *interpretation* of *visual meaning*:

The energy that strikes the Entity, Top Crown-Body Shaft-Base Foundation, or head-(torso)-chest-heart-stomach-legs, (Ρ (in Greek) (in English) R)uns off from an eternal streaming source of life-giving force, nourishing and inspiring your life (life, in Greek: ΖΩΗ (zōē)), uniting you with the Whole. This energy sometimes fertilizes thought, inspires imagination, and creates new worlds, sometimes causing attraction and aiming at creating a human being (human, in Greek: ΑΝΘΡΩΠΟΣ (hánthrōpos)). With the Starting point being the blue, it universally shakes the "being" through a lightning-quick instantaneous force! The sender is beauty, and the receiver is life!

Undoubtedly, the astute Greek spirit expressed meanings through the *Arts* and *Architecture*. Why not condense its thought into 'silent' relationships of *Writing*, *Geometry*, *Meaning*, and *Concept*?

Thank you for your reading.

Notes

1. Ibid. is an abbreviation for the Latin term 'ibidem,' meaning 'in the same place.' It is used in citations to refer to a source cited in the immediately preceding citation.

²⁹ In "*Republic* 524d-530e," Plato outlines the five mathematical sciences (which reflects the Pythagorean quadrivium, with geometry divided into "plane" and "solid") (Olsen, 1985): (1) arithmetic, (2) plane geometry, (3) solid geometry, (4) harmonics (music), and (5) spherics (astronomy). Researching pharaonic architecture surfaced Pythagorean geometry and arithmetic, influencing the Greek thought process

References

***Figures 2,3,15,17: Public domain due to the passage of 70 years since the creator's death.

- Al-Buni, A.W. (1345). *Shams al-ma'ārif al-kubrā wa-laṭā'if al-'awārif*, lit. 'the Book of the Sun of Gnosis and the Subtleties of Elevated Things'. Algeria. [Screenshot] Available at: <https://archive.org/details/McGillLibrary-131812-5180/page/n23/mode/2up> & <https://archive.org/details/SHAMSULMOARIFORIGINALHANDWRITTEN/page/n7/mode/2up>
- Andreou, M., (2019). Lexemes. *Oxford Bibliographies*. Last reviewed: 27 March 2019. Last modified: 27 March 2019. Oxford University Press. [online] Available at: <https://www.oxfordbibliographies.com/display/document/obo-9780199772810/obo-9780199772810-0232.xml> [Accessed 30 June 2024].
- Andreou, S. (2020). Protohistory. In A.-F. Christidis (Ed.), *A History of Ancient Greek: from the Beginnings to Late Antiquity* (pp.193-201) (4th r. of 2nd ed.). Thessaloniki: Institute of Modern Greek Studies (Manolis Triantafyllidis Foundation).
- Aristophanes, (1924). *Aristophanes: Volume III, The Lysistrata, The Thesmophoriazusae, The Ecclesiazusae, The Plutus*. Translated by B.B. Rogers. London: William Heinemann Ltd; Cambridge, MA: Harvard University Press. [online] Available at: <https://archive.org/details/aristophaneswith03arisuoft/page/132/mode/2up>
- Aristotle, (1955). *On Sophistical Refutations, On Coming-to-Be and Passing-Away, On the Cosmos*. Translated by E.S. Forster and D.J. Furley. Edited by J. Henderson. Loeb Classical Library, LCL 400. Cambridge, MA: Harvard University Press. [online] Available at: https://www.loebclassics.com/view/aristotle-cosmos/1955/pb_LCL400.409.xml [Accessed 30 June 2024].
- Aristotle, (1957). *On the Soul, Parva Naturalia, On Breath*. Translated by W.S. Hett. Revised and reprinted ed. Cambridge, MA: Harvard University Press. (Original work published 1936). [online] Available at: https://www.loebclassics.com/view/aristotle-soul/1957/pb_LCL288.39.xml?result=25&rskey=0WW1vV [Accessed 30 June 2024]. DOI: 10.4159/DLCL.aristotle-soul.1957.
- Barthes, R. (1977). *Image, Music, Text*. Essays selected and translated by S. Heath. London: Fontana Press
- Barthes, R., (1968). Elements of Semiology (p.22). 1st American edn. Translated by A. Lavers and C. Smith. New York: Hill and Wang.
- Barthes, R., (1972). *Mythologies*. Translated by A. Lavers. New York: The Noonday Press; and Farrar, Straus & Giroux. Originally published in French as *Mythologies* by Editions du Seuil, Paris, 1957.
- Beekes, R.S.P. (2014). *Pre-Greek: Phonology, Morphology, Lexicon*. (S. Norbruis, Ed., Vol. 2). Leiden: Brill.
- Benveniste, É. (1981 1966). Nature du signe Linguistique. In Κ. Παπαγιώργης (Trans.), *Κείμενα Σημειολογίας: Μπενβενίστ, Μπαρτ, Ντεριντά, Πιρς, Φουκώ* (pp. 14-53). Αθήνα: Νεφέλη.

- Biblica (2011). *Holy Bible, New International Version*. Available at:
<https://www.biblegateway.com/passage/?search=Revelation%2022%3A13-15&version=NIV> [Accessed 30 June 2024].
- Bloomfield, L. (1923) *Language*. London: George Allen & Unwin.
- Cambridge University Press & Assessment, (2024). Neuron. In: *Cambridge Dictionary*. Available at:
<https://dictionary.cambridge.org/dictionary/english/neuron> [Accessed 30 June 2024].
- Ceccarelli, P., (2013). *Ancient Greek Letter Writing: A Cultural History (600 BC-150 BC)*. Oxford: Oxford University Press.
- Chadwick, J., (1987). *Linear B and Related Scripts*. Berkeley: University of California Press.
- Chomsky, N., (2002). *Syntactic Structures*. 2nd edn. Berlin: de Gruyter Mouton.
- Colless, B.E. (2010). Proto-alphabetic inscriptions from the Wadi Arabah. *Antiquo Oriente*, 8, 75-96.
- Coulmas, F. (1991). *The Writing Systems of the World*. Oxford: Blackwell.
- Danesi, M. (2004). *Messages, Signs, and Meanings: A Basic Textbook in Semiotics and Communication* (3rd ed.) (Vol. 1 in the series *Studies in Linguistic and Cultural Anthropology*). Toronto: Canadian Scholars' Press.
- Daniels P.T. & Bright W. (Eds.) (1996). *The world's writing systems*. Oxford: Oxford University Press.
- Dehaene, S. and Cohen, L., (2007). Cultural recycling of cortical maps. *Neuron*, 56(2), pp.384-398. doi: 10.1016/j.neuron.2007.10.004. PMID: 17964253.
- Derrida, J. (1967). *De la Grammatologie*. Paris: Éditions de Minuit
- Dictionary of the History of Ideas. (2006). Alchemy. In: web.archive.org. [online] Available at:
<https://web.archive.org/web/20060904072826/http://etext.lib.virginia.edu/cgi-local/DHI/dhi.cgi?id=dv1-04> [Accessed 10 Feb. 2023].
- Diels, H. (1903) *Die Fragmente der Vorsokratiker*. Berlin: Weidmannsche Buchhandlung.
- Diringer, D. (1953). *The Alphabet: A Key to the History of Mankind* (2nd & rev. ed.). London: Hutchinson.
- Diogenes Laertius, (2016). 'Early Greek Philosophy V Empedocles [31 DK]'. In: A. Laks and G.W. Most, eds., *Early Greek Philosophy: Volume V, Western Greek Thinkers, Part 2*. Loeb Classical Library, LCL 528. Cambridge, MA: Harvard University Press. [online] Available at:
<https://www.loebclassics.com/view/empedocles-doctrine-2016-pb/LCL528.503.xml> DOI: 10.4159/DLCL.empedocles-doctrine.2016
- Eco, U., (1979). *A Theory of Semiotics*. London: Indiana University Press.
- Gardiner, A. (1957). *Egyptian Grammar* (3rd rev. ed.). Oxford: Griffith Institute
- Genette, G. (1995). *Mimologies*. Translated by Th. E. Morgan. Lincoln & London: University of Nebraska Press. [online] Available at:
<https://archive.org/details/mimologiesmimolo0000gene/page/52/mode/2up?view=theater>
- Guiraud, P., (1975). *Semiology*. Translated by G. Gross. London: Routledge & Kegan Paul. [online] Available at:
<https://archive.org/details/semiology00guir/page/26/mode/2up?view=theater>
- Halevi, J. (1905). *Sefer Kuzari: Kitab al Khazari*. Translated by H. Hirschfeld.

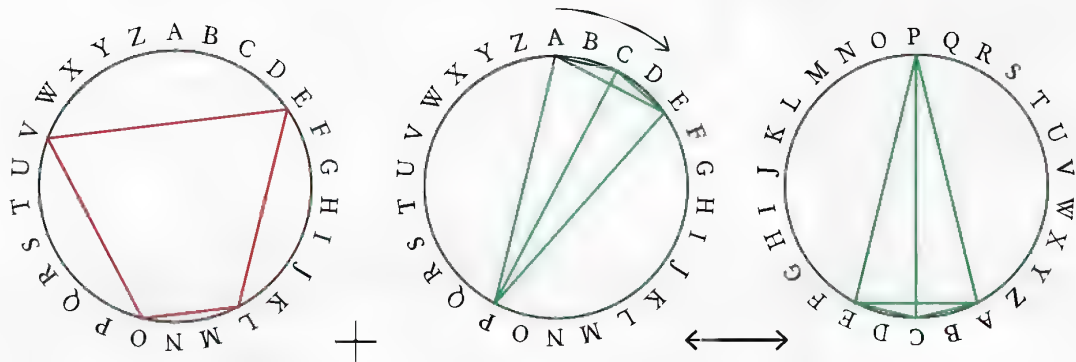
- Haspelmath, M., (2010). *Understanding Morphology*. 2nd edn. London: Hodder Education. ISBN 978-0-340-95001-2. OCLC 671004133.
- Hodge, R. & Kress., G. 1988. *Social Semiotics*. New York: Cornell University Press.
- Ifrah, G. (2000). *The Universal History of Numbers from Prehistory to The Invention of The Computer* (D. Bellos, E. F. Harding, S. Wood & I. Monk, Trans.). New York: John Wiley & Sons. p.218-226.
- Karali (Κάραλη), M. (2020). Συστήματα γραφής. In Α.-Φ. Χριστίδης (Christidis) (Ed.), *A History of Ancient Greek: from the Beginnings to Late Antiquity* (pp.184-192) (4th r. of 2nd ed.). Thessaloniki: Institute of Modern Greek Studies (Manolis Triantafyllidis Foundation)
- Kress, G., & Van Leeuwen, T. (2006). *Reading Images: The Grammar of Visual Design*. 2nd edn. London: Routledge (Original work published 1996).
- Kruft, H.-W. (1994). *A History of Architectural Theory from Vitruvius to the Present*. New York: Princeton Architectural Press.
- Lacan, J., (1977). *Écrits: A Selection*. Translated by A. Sheridan, with a foreword by M. Bowie. London: Tavistock Publications. First published by Routledge in 1989. First published in Routledge Classics in 2001.
- Lacan, J., (1998). *The Seminar of Jacques Lacan: Book XX, On Feminine Sexuality, The Limits of Love and Knowledge (Encore 1972-1973)*. Edited by J.-A. Miller. Translated with notes by B. Fink. New York: W.W. Norton & Company. First published as a Norton paperback 1999. Originally published in French as *Le Séminaire, Livre XX, Encore, 1972-1973* by Editions du Seuil, Paris, 1975.
- Lagopoulos, A.Ph. (1989, October 26-29). *Μη Γλωσσικά Συστήματα και Ιδεολογία: Τέχνη και Χώρος στην Αρχαία Ελλάδα (Non-Linguistic Systems and Ideology: Art and Space in Ancient Greece)* [Paper presentation], 82-127. Η Ζωή των σημείων: 3^ο Πανελλήνιο Συνέδριο Σημειωτικής Ελληνικής Σημειωτικής Εταιρείας στο Πανεπιστήμιο Ιωαννίνων, Ιωάννινα, Ιωαννιτών, Ελλάδα. Θεσ νίκη: Παρατηρητής (The Life of Signs: 3rd Panhellenic Semiotics Conference of the Hellenic Semiotics Society at the University of Ioannina, Ioannina, Ioanniton, Greece. Venue: Observer).
- Lagopoulos, A.Ph., Boklund-Lagopoulou, K. (2016). *Θεωρία της σημειωτικής: Η παράδοση του Ferdinand de Saussure (Theory of Semiotics: The Tradition of Ferdinand de Saussure)*. Athens: Patakis
- Lévi-Strauss, C., (1963). *Structural Anthropology*. Translated from the French by C. Jacobson and B.G. Schoepf. New York: Basic Books.
- Livio, M. (2003). *The Golden Ratio: The Story of Phi, the World's Most Astonishing Number*. New York: Broadway Books.
- Lund, F.M. (1921). *Ad Quadratum - A study of the geometrical bases of classic and medieval religious architecture*. London: B.T. Batsford.
- Lypourlis, D. (2007). *Ancient Greek metric: A first approach*. Thessaloniki: Epicenter.
- Maddison, F., Savage-Smith, E., Pinder-Wilson, R.H., & Stanley, T. (1997). *Science, Tools and Magic : Part One: Body and Spirit, Mapping the Universe. Part Two: Mundane Worlds*. Vol. 12. Oxford University Press.
- Mitchell, W.J. (1990) *The logic of Architecture: Design, Computation, and Cognition*. Massachusetts: MIT Press
- McLuhan, M. (1994). *Understanding Media: The Extensions of Man*. Cambridge, MA: The MIT Press.

- Norman, J., (n.d.). *Perhaps the Oldest Surviving Architecture: Circa 23000 to 12000 BCE. Athena's Owl. Exploring the History of Information and Media through Timelines*. Available at:
https://www.historyofinformation.com/detail.php?id_3449
- Olsen, S.A., (1985). *The Pythagorean Plato and the Golden Section; A Study in Abductive Inference*. Ph.D. dissertation, University of Florida.
- ᾽(phúō) • φῶ (n.d.). *Wiktionary: The free dictionary*. [online] Available at:
<https://en.wiktionary.org/wiki/φῶ>
- Papadopoulou, M. (2001, September 28-30). Η Ελληνική Γραφή πέρα από το αλφάβητο (Greek Scripture beyond the alphabet) [Paper presentation], 233-242. **SEMIOTIC SYSTEMS AND COMMUNICATION** (Σημειωτικά συστήματα και επικοινωνία: Πράξη, διάδραση, περίσταση και αλλαγή): 6th Panhellenic Conference of Semiotics Hellenic Semiotic Society at A.P.Th., Thessaloniki, Thessaloniki, Hellas (in Greek 6ο Πανελλήνιο Συνέδριο Σημειωτικής Ελληνικής Σημειωτικής Εταιρείας στο Α.Π.Θ., Θεσ νίκη, Θεσ νικής, Ελλάδα. Θεσ νίκη: Παρατηρητής).
- Principe, L., (2013). *The Secrets of Alchemy*. Chicago: The University of Chicago Press, pp. 14, 61. Available at:
<https://archive.org/details/secretsofalchemy0000prin> [Accessed 4 April 2023].
- Proclus (2007). *On Plato Cratylus*. Translated by B. Duvick, edited by H. Tarrant. London: Bloomsbury Academic
- Reitzenstein, R. (1904). *Poimandres: Studien zur griechisch-ägyptischen und frühchristlichen Literatur*. Leipzig: B.G. Teubner.
- Robins, J.R. (1989). *A Short History of Linguistics*. 4th edn. New York: Routledge.
- Rogers, H. (2005). *Writing System. A linguistic approach*. Victoria: Blackwell Publishing.
- Sarigiannis, M.G. (1985). *Εισαγωγή στην ιστορία και θεωρία της πόλης (Introduction to the history and theory of the city*. Athens, Greece
- Saussure, F. de, (2011). *General Linguistics*. Translated by W. Baskin, edited by P. Meisel and H. Saussy. New York: Columbia University Press.
- Saussure, F.M. (1993). *Saussure's Third Course of Lectures on General Linguistics*. Pergamon Press. [online] Available at:
https://books.google.gr/books?redir_esc_v&hl_el&id_-9ZiAAAAMAAJ&focus_searchwithinvolume&q_doric
- Sellier, J. (2021). *Μια Ιστορία των Γλωσσών και των Λαών που τις Μιλούν (Θ.Γ. Καράμπελας)*. Αθήνα: Ινστιτούτο του Βιβλίου-Καρδαμίτσα.
- Shaykh Muhammad Hisham Kabbani (2010). : Question Answer. eshaykh.com.
<https://web.archive.org/web/20111026153056/http://eshaykh.com/author/msh>
- Smith, D.E., (1958). 'Reading and writing numbers: Greek numerals' in *History of Mathematics*. Vol. 2. New York: Dover Publications. [online] Available at:
https://books.google.com/books?id_uTytJGnTf1kC&pg_PA49
- Stiny, G. and Gips, J. (1972). Shape Grammars and the Generative Specification of Painting and Sculpture. *Information Processing 71 Proceedings of the IFIP Congress 1971*, 2(71), 1460-1465.
- Summers, K., (2022). 'UNLV Research: No, the Human Brain Did Not Shrink 3,000 Years Ago.' *University of Nevada, Las Vegas. News Center*. Available at:
<https://www.unlv.edu/news/release/unlv-research-no-human-brain-did-not-shrink-3000-years-ago> [Accessed 30 June 2024].

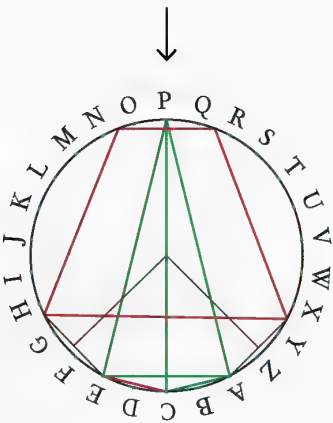
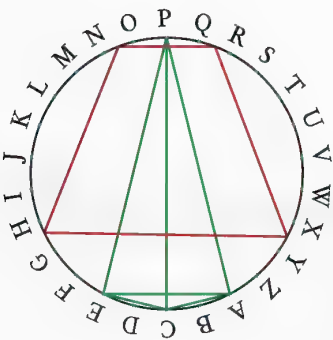
- (Svalikou) Σβαλίκου, Χ. (2011). *Η ερμηνεία της εικόνας ως σημείου της οπτικής επικοινωνίας (The interpretation of the image as a point of visual communication)*. Θεσ νίκη: University Studio Press
- Tory, G. (1927). *Champ fleury*. New York: The Grolier Club.
- Tournikiotis, P. (1994). *Ο Παρθενώνας και η Ακτινοβολία του στα Νεώτερα Χρόνια (The Parthenon and Its Impact in Modern Times)*. Athens: Melissa.
- UNESCO World Heritage Centre, (n.d.). *Göbekli Tepe*. Türkiye. Date of Inscription: 2018. Criteria: (i)(ii)(iv). Property: 126 ha. Buffer zone: 461 ha. Dossier: 1572. [online] Available at: <https://whc.unesco.org/en/list/1572>
- Unknown Rabbi (1997). *Sefer Yetzirah: Book of Creation (Rev. Ed.)* (A. Kaplan, Trans). York Beach: Weiser Books. p.108-111.
- Vendryes, J. (1931). *Language A Linguistic Introduction To History*. London: Kegan Paul, Trench, Trubner.
- Vitruvius, 'Latin: Marco Vitruvio Pollione' (1931). *On Architecture, Volume I: Books 1-5*. Translated by Frank Granger. Loeb Classical Library 251. Cambridge, MA: Harvard University Press. (Original work published ca. 30 20 B.C.E.). [online] Available at: https://www.loebclassics.com/view/vitruvius-architecture/1931/pb_LCL251.159.xml?readMode=recto
- Von Guiraud, P., (1973). 'CHAPITRE II - LA SIGNIFICATION : FORME ET SUBSTANCE DU SIGNE' in *La sémiologie*. 2e éd. mise à jour. Paris: Presses universitaires de France.

ENGLISH ALPHABET | CIRCLE | 26 LETTERS

LOVE + PEACE ↔ PEACE



LOVE + PEACE



By Petros Petrakis (M.Arch)
Redesign
The Campaign for Nuclear
Disarmament symbol



2nd PART (02/02)

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GREEK ALPHABET | CIRCLE | 27 LETTERS |

OBSERVATIONS

Φ Ω Σ (phôs), Φ Ο Ω Σ (phóōs), Φ Α Ο Σ (pháos)
Φ Α Ψ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 2

DISCLAIMER: The observations and comments are made within a literary framework and should be taken as such. Any numerical coincidence is perceived as a beautiful serendipity that highlights the beauty of the existence of the human species and languages. This is because, according to the current scientific data, civilization has thus far managed to measure the speed of light and other quantities with exceptional accuracy. The author bears no responsibility for how the reader interprets the issue as a whole and does not endorse any position from the entirety of the text.

PRELIMINARY REMARKS

† The Greek alphabet of 27 letters is arranged in a 3x9 table (matrix). The dimensions of the 3x9 table consist of 3 rows and 9 columns. It is symbolized in Table 3x9.

		Ancient Greek Alphabet (27 letters) Table 3x9										
Columns DIGITAL ROOT, D.R.**		1	2	3	4	5	6	7	8	9		
Ζ*												
	1st row	Modern	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ		
		Ancient	Ɑ	Ɱ	Ɐ	Ɒ	ⱱ	Ⱳ	ⱳ	ⱴ	Ⱶ	
		Numeric Value	1	2	3	4	5	6	7	8	9	
	2nd row	Modern	Ι	Κ	Λ	Μ	Ν	Ξ	Ο	Π	Ρ	
		Ancient	Ɑ	Ɱ	Ɐ	Ɒ	ⱱ	Ⱳ	ⱳ	ⱴ	Ⱶ	
		Numeric Value	10	20	30	40	50	60	70	80	90	
	3rd row	Modern	Σ	Τ	Υ	Φ	Χ	Ψ	Ω	Ͱ		
		Ancient	ⱶ	ⱷ	ⱸ	ⱹ	ⱺ	ⱻ	ⱼϚ	Ω	ͱ	
		Numeric Value	100	200	300	400	500	600	700	800	900	
	Πυθμενικός Αριθμός ή D.R.**		Sum	111	222	333	444	555	666	777	888	999
666			1665			2664						
(6+6+6=)			(1+6+6+5=)			(2+6+6+4=)						
18			18			18						
(1+8=)			(1+8=)			(1+8=)						
9			9			9						
(9+9+9=)												
27												
9												

† < <https://brilliant.org/wiki/digital-root/> > Number Theory, definition: [Digital Root, D.R.**]: The digital root or digital sum of a non-negative integer is the single-digit value obtained by an iterative process of summing digits, on each iteration using the result from the previous iteration to compute the digit sum. The process continues until a single-digit number is reached.

In each iteration, the result from the previous iteration is used to calculate a digit sum. For example, the digital root of 55 is 1 because 5+5=10 and 1+0=1. Every natural number corresponds to a cardinal number. Alternatively, this correspondence is determined by constructing an Nx9 table. In the table with nine columns, the D.R.** is produced by the vertical correspondence of any natural number (N={1,2,3,...}) with one of the 9 cardinal numbers.‡

† The natural numbers 1,2,3,4,5,... (excluding 0) are placed in a table of 9 columns. At the top of each column are the first nine numbers (1,2,3,4,5,6,7,8,9) (cardinal numbers). The finding of the [Digital Root, D.R.] is done through the correspondence of each number in the table to the first row of units. For the purposes of observations, the D.R. is symbolized as Γ and N* denotes natural numbers excluding zero..‡

† Pseudo-Callisthenes (360–327 BCE), "*Alexander Romance*," Book 1, chapter 33.

There is an equivalent relationship of letter substitution with numerical values and (conversely) numbers with letters. ‡

		Γ ₁	Γ ₂	Γ ₃	Γ ₄	Γ ₅	Γ ₆	Γ ₇	Γ ₈	Γ ₉
Digital Root (D.R.)		1	2	3	4	5	6	7	8	9
N*	1	2	3	4	5	6	7	8	9	
	10	11	12	13	14	15	16	17	18	
	19	20	21	22	23	24	25	26	27	
	28	29	30	31	32	33	34	35	36	
	37	38	39	40	41	42	43	44	45	
	46	47	48	49	50	51	52	53	54	
	55	56	57	58	59	60	61	62	63	
	64	65	66	67	68	69	70	71	72	
	73	74	75	76	77	78	79	80	81	
	82	83	84	85	86	87	88	89	90	
	91	92	93	94	95	96	97	98	99	
	100	101	102	103	104	105	106	107	108	
	∞									
	N* : C _n = C _{n-1} + 1 για C ₀ =0, C ₁ =1 και n≥1									
		Γ ₁	Γ ₂	Γ ₃	Γ ₄	Γ ₅	Γ ₆	Γ ₇	Γ ₈	Γ ₉
Digital Root (D.R.)		1	2	3	4	5	6	7	8	9
N*	Α Ι Ρ	Β Κ Σ	Γ Λ Τ	Δ Μ Υ	Ε Φ Ν	Ζ Ξ Ψ	Η Θ Ϟ			
	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ		
	Ι	Κ	Λ	Μ	Ν	Ξ	Ο	Π	Ρ	
	19	Κ	21	22	23	24	25	26	27	
	28	29	Α	31	32	33	34	35	36	
	37	38	39	Μ	41	42	43	44	45	
	46	47	48	49	Ν	51	52	53	54	
	55	56	57	58	59	Ξ	61	62	63	
	64	65	66	67	68	69	Ο	71	72	
	73	74	75	76	77	78	79	Π	81	
	82	83	84	85	86	87	88	89	Ρ	
	91	92	93	94	95	96	97	98	99	
	Ρ	101	102	103	104	105	106	107	108	
	∞									
	N* : C _n = C _{n-1} + 1 για C ₀ =0, C ₁ =1 και n≥1									

† It is stated that there is the possibility of interchange/substitution of letters found in the same column due to the equal D.R. value. For example, Α can replace Ι, because they have a D.R. of 1, as the common characteristic that the numbers Ι(=Α), Ι0(=Ι), Ι9, 28, 55, Ι00(=Ρ), Ι000 is that they are in column Γ₁ of unit 1

Therefore, they can replace each other due to the equivalence of the D.R. value without considering the actual numerical values.

Adding equal D.R. values keeps the D.R. sum unchanged but not the actual numerical sum. For example:

(a) 10+20+30+40=100 και (b) 100+200+300+400=1000, these two numerical operations always have the D.R. value 1, since for 100 it holds that 1+0+0=1 and for 1000 it holds that 1+0+0+0=1. This happens because the pairs 10-100, 20-200, 30-300, and 40-400 are in the same column of the table.‡

GREEK ALPHABET | CIRCLE | 27 LETTERS |

Φ Ω Σ (phôs), ΦΟΩΣ (phôōs), Φ Α Ο Σ (pháos)
Φ Α Ξ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 3

† Vitruvius (*de architectura* [III, I]) attributes the composition of the human body to Nature (natura) and notes that it can be analyzed within the circle in geometric relationships (proportions) that reference reality, using Euclidean geometry as an initial tool. This precise analysis predates the human species, as the circle can be drawn by a being with minimal human-like capabilities. In other words, the geometric relationships originating from the human body preexist everything within the circle. This study attempts to extend his position. In this context, some words of human speech are placed in a circle. Some are observed to produce harmonic shapes, while others contain the conventional quantities of today's sciences (e.g., physics, chemistry) within a semiotic direction. I call the occult search (through transmutation thought, stemming from the tradition of the Pre-Socratics and alchemists) ROOSOPHIA ('ΠΟΟΣΟΦΙΑ,' with a foundational number 4, clearly referencing the Tetractys: 4 and generate). The word is derived from the Greek Words of Wisdom (=‘ΣΟΦΙΑ,’ Sophia) and the Greek noun of Flow (=‘ΠΟΗ,’ roí). Wisdom (‘ΣΟΦΙΑ,’ sophia) that "flows" (Π pre-eternally within the circle through semiotic correlations with Geometry (=ΓΕΩΜΕΤΡΙΑ, /ge.o.me.tri.a:/) as the mother and the Number (=ΑΡΙΘΜΟΣ, arithmós) as the father.

Below is a compilation of observations on the circle, mainly focusing on the ancient Greek words of light. It is observed, as mentioned, a coincidental numerical identification with present quantities. Additionally, the connection of epic words of light with the rise of Kundalini, the activation of the pineal gland, is attempted. I bring corresponding correlations and examples with other cultures. I propose a new perspective on Occult Philosophy. An example of an occult treatise is Three Books of Occult Philosophy (De Occulta Philosophia libri III) by Heinrich Cornelius Agrippa, who briefly refers to the Pythagorean tradition. †

† Here are some brief details from previous centuries regarding the connections between numbers and letters.. †

† Agrippa von Nettesheim, Heinrich Cornelius. (1533). *De Occulta Philosophia: 1486-1535* (p. CXLIII & CXLIII). [online] Available at: <https://archive.org/details/DeOccultaPhilosophiaLoc1533/https://ia801504.us.archive.org/12/items/DeOccultaPhilo>

sophiaLoc1533/2009gen12345_text.pdf [December 4, 2019]

O Heinrich Cornelius Agrippa (German Renaissance polymath, physician, legal scholar, soldier, knight, theologian, and occult writer) applied the concept of "arithmancy" and Gematria to the classical Latin alphabet in the 16th century in "Three Books of Occult Philosophy." He mapped the letters according to the positional value of the Latin alphabet at that time (see image on the right). He states the following (Chap. xx. What numbers are attributed to letters; and of divining by the same):

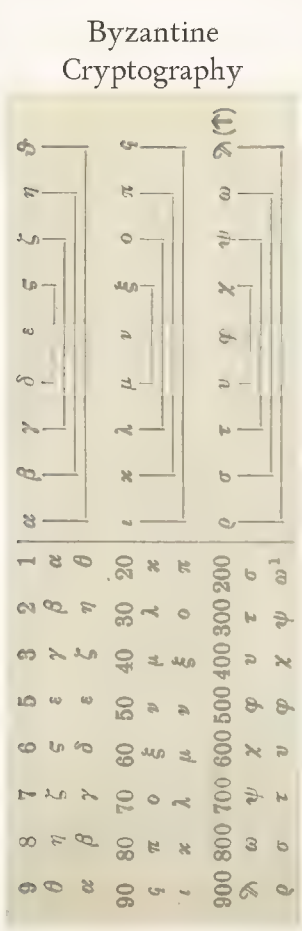
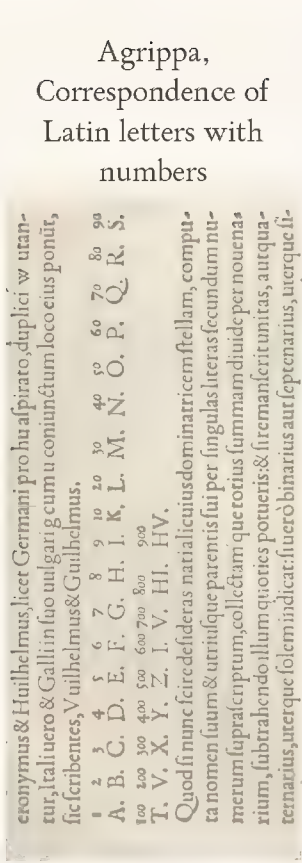
«*The Pythagorians [Pythagorians] say (Aristotle, and Ptolemy are of the same opinion) that the very Elements of letters have some certain divine numbers, by which collected from proper names of things, we may draw conjectures concerning occult things to come. Whence they call this kind of divination Arithmancy, because, viz. it is done by numbers, as Terentianus hath made mention of it in these verses.*» †

† Gardthausen, V. (Viktor Emil), & Robarts -University of Toronto. (1911). *Griechische palaeographie*. p.311. [online] Available at: <https://archive.org/details/griechischepalae02gard/page/110/mode/2up>

In Byzantine cryptography, the correspondence of the letters of the Greek alphabet (of the Koine - official language) with numbers appears. †

† In Greek literature, there is the correspondence of numbers and words by Pseudo-Callisthenes (360–327 BCE). "Alexander Romance," Book 1, chapters 33.

"O Alexander. Who am I? You ask. Take now 200 for the letter first. Add one, then still 100, and one more, Then four times ten and the letter first again. Thus shall you know the very god I am. {The numbers represent the letters of Sarapis' name: 200=S, 1=A, 100=R, and so on. But rather than "four times", the text should say "eighty" (=P).} And Alexander, awakening from sleep and pondering on



the oracle, recognized the great god of the universe, Sarapis. So he built a great altar and ordered that fitting sacrifices should be prepared and that the animals should be slain and laid upon the altar. Then he placed over them a mass of frankincense and heaps of all kinds of spices, and he commanded that all be entertained at a banquet. Next, he bade also Parmenion the architect to prepare a suitable domicile for the wooden image, corresponding to the Homeric verses; as the famous poet Homer wrote somewhere { Iliad, 1'528}" †

† Ifrah, Georges (2000). *The Universal History of Numbers from Prehistory to The Invention of The Computer*. Translated by: D. Bellos, E. F. Harding, S. Wood & I. Monk. New York: John Wiley & Sons. p.218-226.

The Greek alphanumeric system is documented by a papyrus exhibited in the Cairo Museum with the number "Inv. 65 445" and dates to the 3rd century BCE. In this papyrus, the letters of the Greek Alphabet correspond with numbers. In this correspondence, the known three enneads of the 27 ancient Greek letters -Α, Β, Γ, Δ, Ε, Ζ, Η, Θ, Ι, Κ, Λ, Μ, Ν, Ξ, Ο, Π, Q, Ρ, Σ, Τ, Υ, Φ, Χ, Ψ, Ω, Ϝ- whose sequence equates in ascending order to units, tens, and hundreds.

Theophanes the Cerameus (1,129–1,152 CE), bishop of Rossano, in Calabria, Italy, and a famous preacher, in the treatise '*Homily*' (XLIV) notes the numerical equality of the words "God," "Good," "Holy" (=284). (, 2000, p.256-257)

The process of corresponding letters with numbers was a unique kind of cryptography through which messages and meanings were communicated, provided there was sufficient knowledge on the subject (beyond the mystical use). In Georges 's book, '*The Universal History of Numbers from Prehistory to The Invention of The Computer*,' this positioning is documented with examples from several cultures of previous centuries. †

† Frahm, Eckart (15-07-2005). 44) Observations on the Name and Age of Sargon II

(Ifrah, 2000, p. 161)

TRANSCRIPTION AND TRANSLATION OF THE TWO RIGHTMOST COLUMNS				
SIDE 1	LINE 6	𐎲	𐎠𐎡𐎴	1 or 60 ^d A-num
	7	𐎲	𐎠𐎡𐎴	50 ^d En-il
	8	𐎲	𐎠𐎡𐎴	40 ^d E-a
	9	𐎲	𐎠𐎡𐎴	30 ^d Sin (name written as 30)
	10	𐎲	𐎠𐎡𐎴	20 ^d Shmash
SIDE 2	11	𐎲	𐎠𐎡𐎴	6 ^d Adad
	LINE 12	𐎲	𐎠𐎡𐎴	10 ^d Bēl ^d Marduk (the Lord Marduk)
	13	𐎲	𐎠𐎡𐎴	15 ^d Ishtar be-lit ilī (Ishtar queen of the heavens)
	14	𐎲	𐎠𐎡𐎴	En-il 50 ^d Nin-urta, mār 50 (50 Nin-urta, son of the god Enlil) (written as 50)
	15	𐎲	𐎠𐎡𐎴	14 ^d U + gur, ^d Nergal
	16	𐎲	𐎠𐎡𐎴	10 ^d Gibil, ^d Nusku

and on Some Patterns of Assyrian Royal Onomastics. *Nouvelles Assyriologiques Brèves et Utilitaires N.A.B.U. 2005 n°2 (juin). ISSN 0989-5671*; p.46-50. [online] Available at: <https://sepoa.fr/wp/wp-content/uploads/2012/06/2005-2.pdf>

Richter, Sandra L. (2010). *The Epic of Eden: A Christian Entry Into the Old Testament*. InterVarsity Press. ISBN 9780830879113; p.238.

In the 8th century BCE, the earliest example of the connection between letters and numbers with architecture appears. The Assyrian King Sargon II incorporates his name into the building dimensions of an architectural achievement. The flexibility of cuneiform writing to represent both letters and numbers with similar symbols seems to have contributed to the creation of dual meanings that added another layer of meaning to a narrative (each character can be reversed or rotated; see image above).

The inscription of Sargon commemorating the building of his city Dur Sharrukin (Khorsabad) mentions the construction of a city wall with the following dimensions: 4 (units 3,600), 3 (units 600), 1 (units 60), 3 (units 6), and 2 cubits, and states that this number is "the number of my name." Observing the process of transferring numbers from the Sexagesimal Number System (familiar in Mesopotamia) to syllabic cuneiform characters with their corresponding phonetic value, it is concluded that they are both units of measurement of a fortification project and symbols that communicate the king's name (šarru-kīnu = Sargon). †

† [2nd century B.C. – 10th century A.C.]: *Sefer Yetzirah* (Hebrew: Sēṭer Yəṣīrā, 'Book of Formation,' or 'Book of Creation')

Unkown Rabbi (1997). *Book of Creation Sefer Yetzirah*. Revised Edition. Translated by Kaplan, Aryeh. York Beach (ME): Weiser Books. p.108-111: [online] Available at:

<https://archive.org/details/seferyetzirah00arye>

Unkown Rabbi (1893). *THE Book of Formation AND THE Thirty Two Paths of Wisdom: Translated from the Hebrew*. Translated by: Wm. Wynn Westcott, M.B. Supreme Magus of the Soc. Ros. m Anglia. SECOND EDITION. THE THEOSOPHICAL PUBLISHING SOCIETY, [online] Available at: <https://archive.org/details/sepheryetzirahb00rittgoog/mode/2up>

Judah Halevi (1905). *Kitab al Khazari Sefer Kuzari*. Translated by: Hartwig Hirschfeld. [online] Available at: https://en.wikisource.org/wiki/Kitab_al_Khazari/Part_Four

The "Book of Creation" concerns the teachings of Jewish mysticism. Still, the commentator, Spanish Jewish philosopher, physician, and poet Judah Halevi, in his work, *Kuzari* ('Book of Refutation and Proof on Behalf of the Despised Religion'), treated it as a treatise on mathematical and linguistic theory in contrast to the method of Kabbalah (Halevi, 1905, Essay 4:25.)

The book argues that the fundamental elements of the world's creation are numbers and letters, and the existence of the sphere or circle "Galgal" is the cause of the variety of things. The unknown author writes that God:

"placed them in a Galgal [circle or sphere] like a [circular or spherical] wall with 231 gates."

"These twenty-two letters, which are the foundation of all things, He arranged as upon a sphere with two hundred and thirty-one gates, and the sphere may be rotated forward or backward, whether for good or for evil; from the good comes true pleasure, from evil nought but torment."

The commentator Aryeh Kaplan (1997) offers a mathematical interpretation regarding this passage.

He suggests that the number 231 corresponds to the 231 lines of the connecting points of the circle with the 22 Hebrew letters placed. To support his position, he presents diagrams and a mathematical formula as follows: If a number of points are placed in a circle, the number of possible connecting lines is calculated by the formula:

$L = n*(n-1)/2$, where L is the number of lines and n is the number of points.

Therefore, $L = 22*(22-1)/2 = 231$. †

110

SEFER YETZIRAH

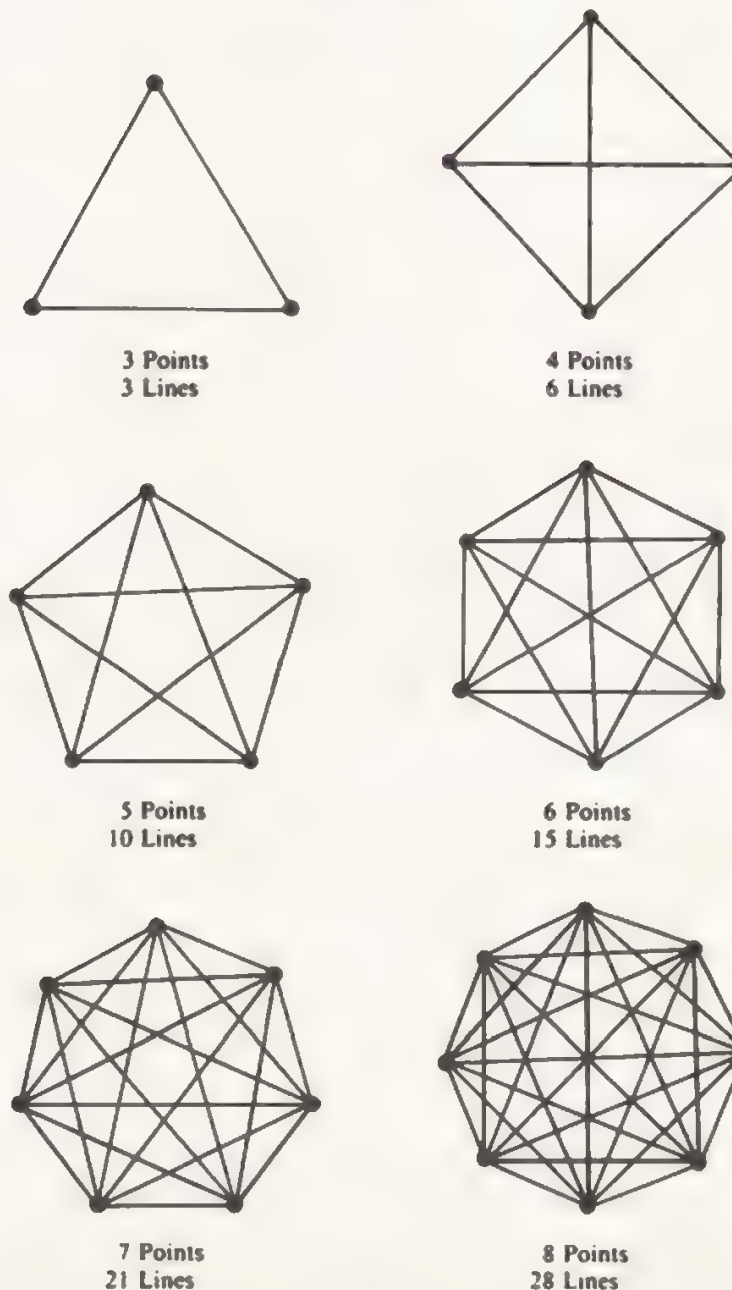


Figure 17. Lines connecting points in a circle.

(Unkown Rabbi, 1997, p.110-111)

† Rabbi Adin Even-Israel Steinsaltz (commentator) (2017). *The Koren Talmud Bavli Noé Talmud : Part 1 : Sanhedrin : Hebrew/English*. Vol. 29. Toby Press LLC. [online] Available at: <https://www.sefaria.org/Sanhedrin.65b.18?lang=bi&with=About&lang2=en>

The 'Babylonian Talmud' dedicates only a few verses that urge the study of *Sefer Yetzirah*, stating:

"65b.18. The 'Gemara' relates another fact substantiating the statement that the righteous could create a world if they so desired: Rav Ḥanina and Rav Oshaya would sit every Shabbat eve and engage in the study of *Sefer Yetzira*, and a third-born calf [figla tilla] would be created for them, and they would eat it in honor of Shabbat." †

Chapter Two

111

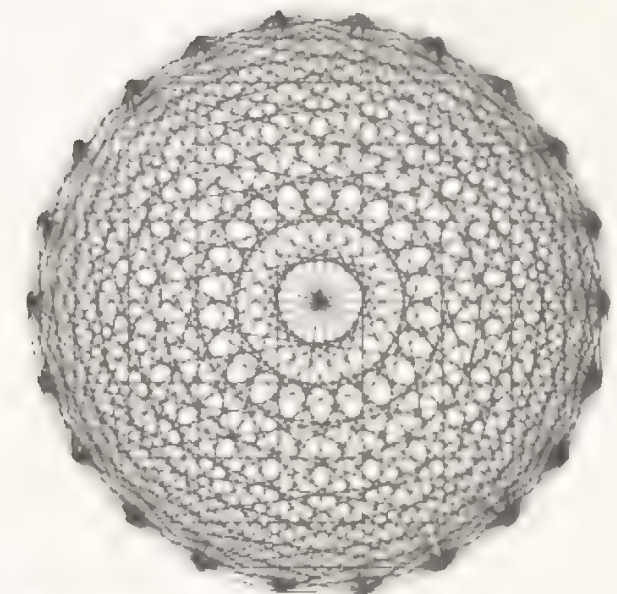


Figure 18. The 231 Gates.

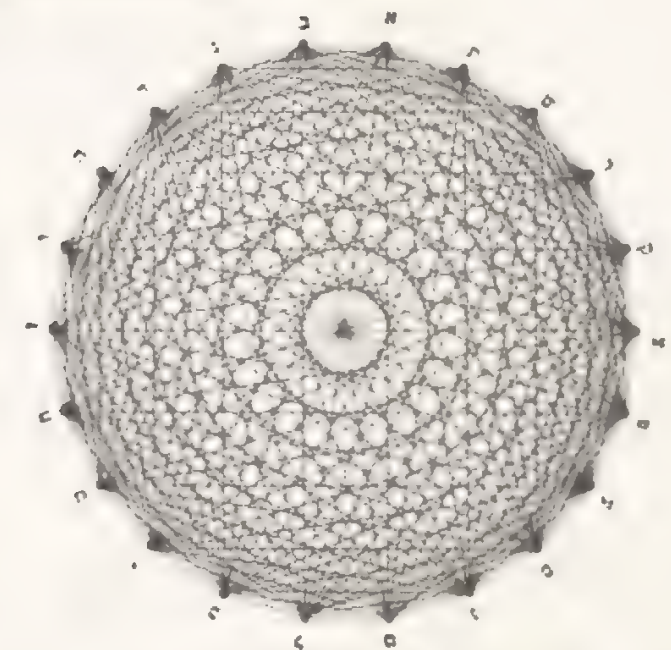


Figure 19. 22 points, 231 lines. The 231 lines connecting the 22 letters are the 231 Gates.

GREEK ALPHABET | CIRCLE | 27 LETTERS |

OBSERVATIONS

Φ Ω Σ (phôs), Φ Ω Σ (phôôs), Φ Α Ο Σ (pháos)
Φ Α Ξ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 5

† Examining the position of the Spanish Jewish philosopher, physician, and poet Judah Halevi, who treats the treatise Book of Creation = Sefer Yetzirah as a mathematical and linguistic theory, the geometric correlations of the Hebrew word for the pyramid in the circle of the 22 Hebrew letters will be sought. Also, the Talmud urges the investigation of the interpretations of the Book of Creation. ‡

† Rogers, Henry (2005). *Writing System. A linguistic approach*. Victoria (AU): Blackwell Publishing. p.115,128

The observation of the word takes into account the intriguing link between the name of the Assyrian King Sargon II and the city walls, a connection that is established through the interchange of numbers and letters, highlighting the shared linguistic heritage of both languages. ‡

† *Vertical section of the Great Pyramid*. (n.d.)., from Etc.usf.edu website: https://etc.usf.edu/clipart/52100/52174/52174_greatpyramid.htm

Salama, E., Ehab, M., & Rühm, W. (2018). Radonand thoron concentrations inside ancient Egyptian tombsat Saqqara region: Time-resolved and seasonal variationmeasurements. *Nuclear Engineering and Technology*, 50(6),950–956. Available at: <https://doi.org/10.1016/j.net.2018.03.017>

Bartlett, C. (2014). The Design of The Great Pyramidof Khufu. *Nexus Network Journal*, 16(2), 299–311 - p. 309.[online] Available at: https://www.academia.edu/47334550/The_Design_of_The_Great_Pyramid_of_Khufu

Tournikiotis, Panayotis (1994). *Ο Παρθενώνας και η Ακινοβολία του στα Νεώτερα Χρόνια. (The Parthenon and its impact in modern times)*. Athens: Melissa. p.67

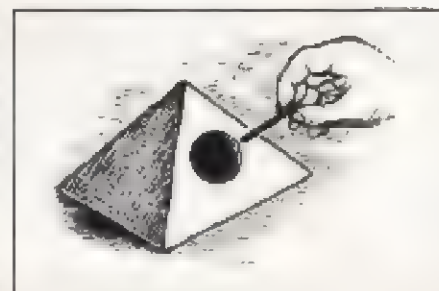
The Pyramid of Khafre, Angle 53.13°
Reprinted from The Pyramid of Khafre - Giza A Layman's Guide (pp. 14). Hamilton, Keith (2021, May 17). [online] Available at: <https://doi.org/10.13140/RG.2.2.28984.67840>

In Greek and Hebrew words, implicit correspondences are observed with some basic angles of the Egyptian pyramids. The most impressive is that in the Hebrew word for pyramid (הַיָּדִי, פִּי, יָד, מִיָּד) the basic proportions of the Pyramid of Giza are observed, and an architectural sketch of a section appears. That is, in the design of the circle, the height of the King's chamber appears, while the angles of the pyramids of Khufu and Khafre are approached, and there is a design hint that the pyramids continue underground. If valid, it seems in the two examples that language played a role in the unique cryptography of designs and transmission of "significant" (for that time) information in a silent way. The recipients only need to know the algorithm used to decode the message. The message is easily transmitted within the crowd by word of mouth, as long as it is pronounced correctly or written correctly, and no one can interrupt it. In the literature, there is an example of creating a pyramid hint, and this is found in ancient Athens through the study of the convergence of the columns of the Parthenon. If valid, it seems that the Hebrew culture might also envision the design of pyramids unless they were experimenting with small constructions, as Viktor Grebennikov mentions in his book 'МОЙ МИР' or 'My World' on page 236 (Copyleft 2006, TedBeer), where he used the angles of the Egyptian Pyramids for his experiments, conducting simple and easy small experiments. It is known that there was secret knowledge concerning mathematical information, which was not accessible to the public and was transmitted through "secret" teaching systems (for example, Pythagorean teaching). ‡

Viktor Grebennikov (2006). «МОЙ МИР»: 'My World'. TedBeer. p.236.

Виктор Гребенников «МОЙ МИР»

41 см. Узкий конец
лет 13 глубоких за-
«гармошки». Жел-
зла, послабее, даже
а проволока годится
тонкая, а еще луч-
и толстой изоляци-
слойность ее усили-
Если взять жезл.
нке, то выходящие
тальной спитали сум.

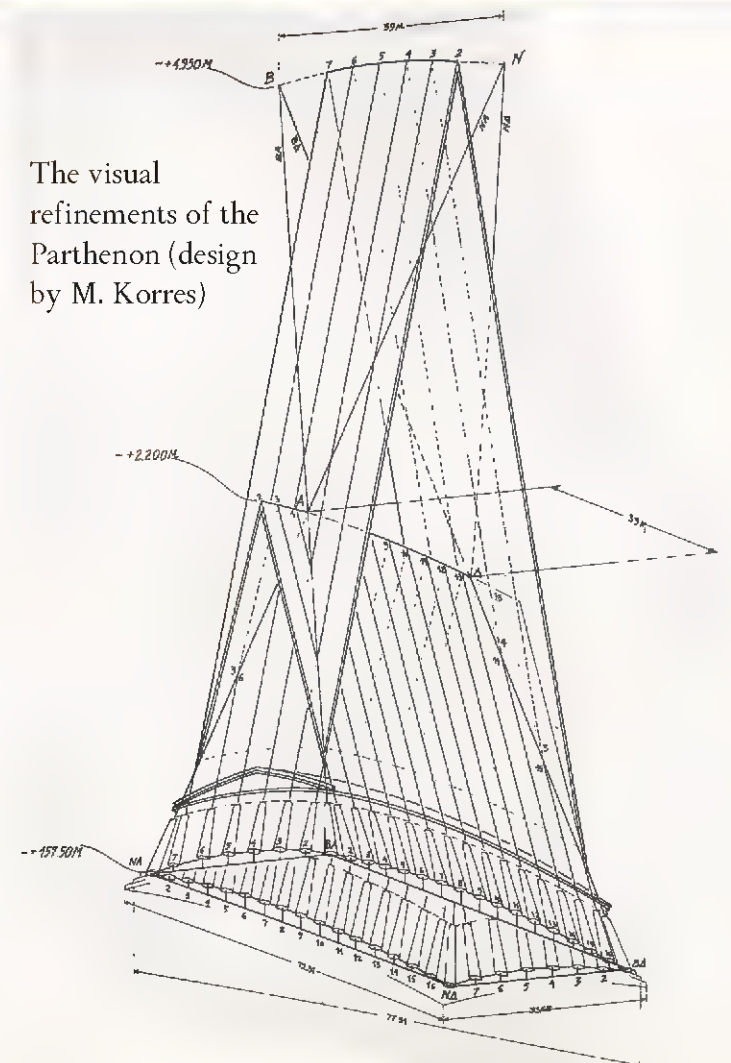


Hebrew Alphabet



Greek Alphabet

pyramid
πυραμῖς
πυραμίδα



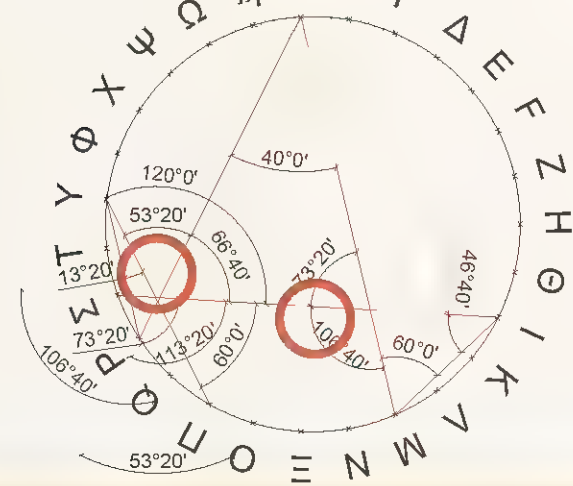
GREEK ALPHABET | CIRCLE | 27 LETTERS

OBSERVATIONS

Φ Ω Σ (phôs), Φ Ω Σ (phóōs), Φ Α Ο Σ (pháos)
Φ Α Ψ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 6

† **MORE DETAILED:** In the case of the Hebrew word פִּירַמִּידָא (Πυραμίδα), from the resulting shape after connecting certain points-letters, the design of the cross-section of an Egyptian pyramid, such as that of Djoser, Khafre, or Khufu (Cheops), is derived. Upon closer inspection, two triangular shapes are observed: the upper isosceles triangle and the lower scalene triangle. The average (53.18°) of the two angles 57°16' (57.27°) and 49°5' (49.09°) of the isosceles and scalene triangles approximate the angle 53.13° of the Khafre pyramid, as does the angles (53°20' and 73°20' or 53.33° and 73.33°) of the Greek word "ΠΥΡΑΜΙΣ" in the circle of 27 letters. Additionally, the blue line of the isosceles triangle, which results from the parallel line to the two parallel sides of the isosceles trapezoid (פִּרְיָם) of the two diagonals, approximates the height of the position of the King's Chamber of the Khufu (Cheops) Pyramid. The scalene triangle of the shape perhaps indicates the continuation of the pyramid below ground level or (as an inverted image) symbolizes that the total material of the pyramid's construction at its topmost point is interrupted (as happens). Few knew these facts then, and such information could be quickly and secretly transferred as knowledge by word of mouth throughout the territory and beyond without the need for a specific design. ‡

pyramid
πυραμῖς
πυραμίδα

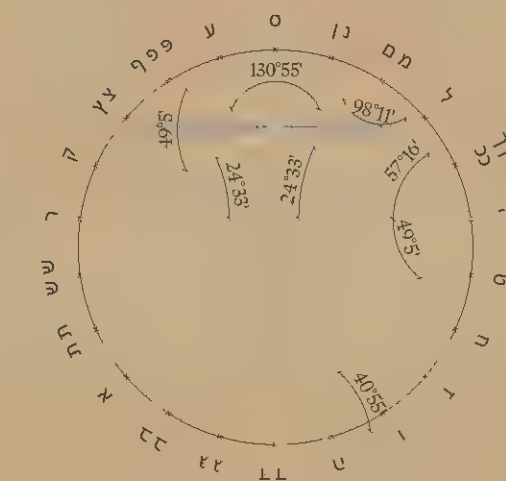


Hebrew Alphabet (22 letters)

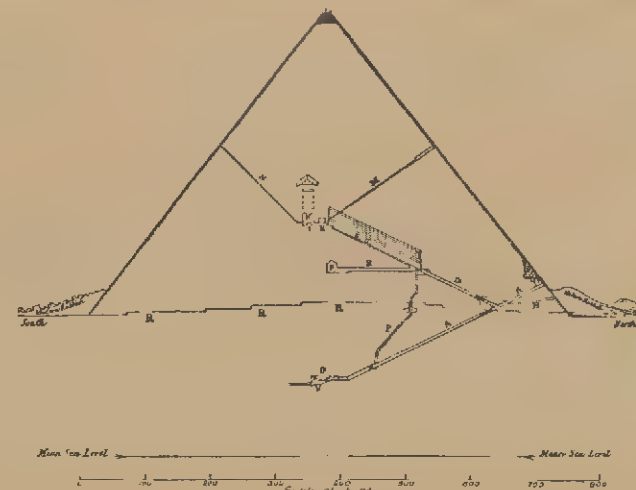


Hebrew Alphabet (22 letters)

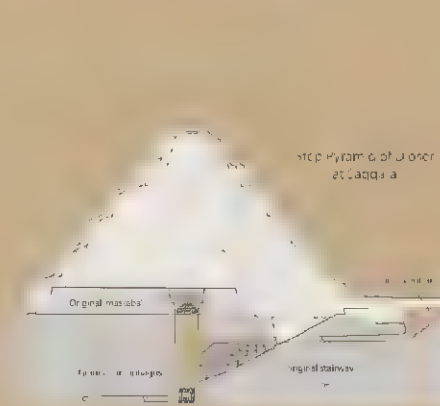
pyramid
פִּירַמִּידָא
πυραμίδα



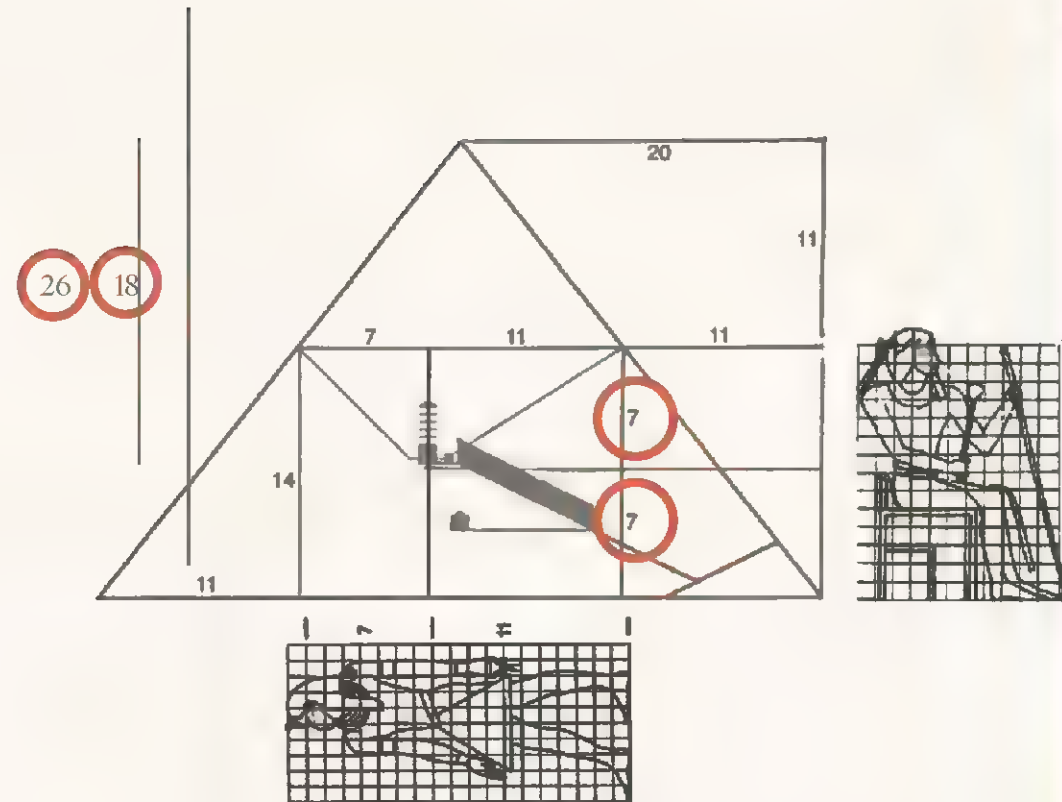
Pyramid of Khufu



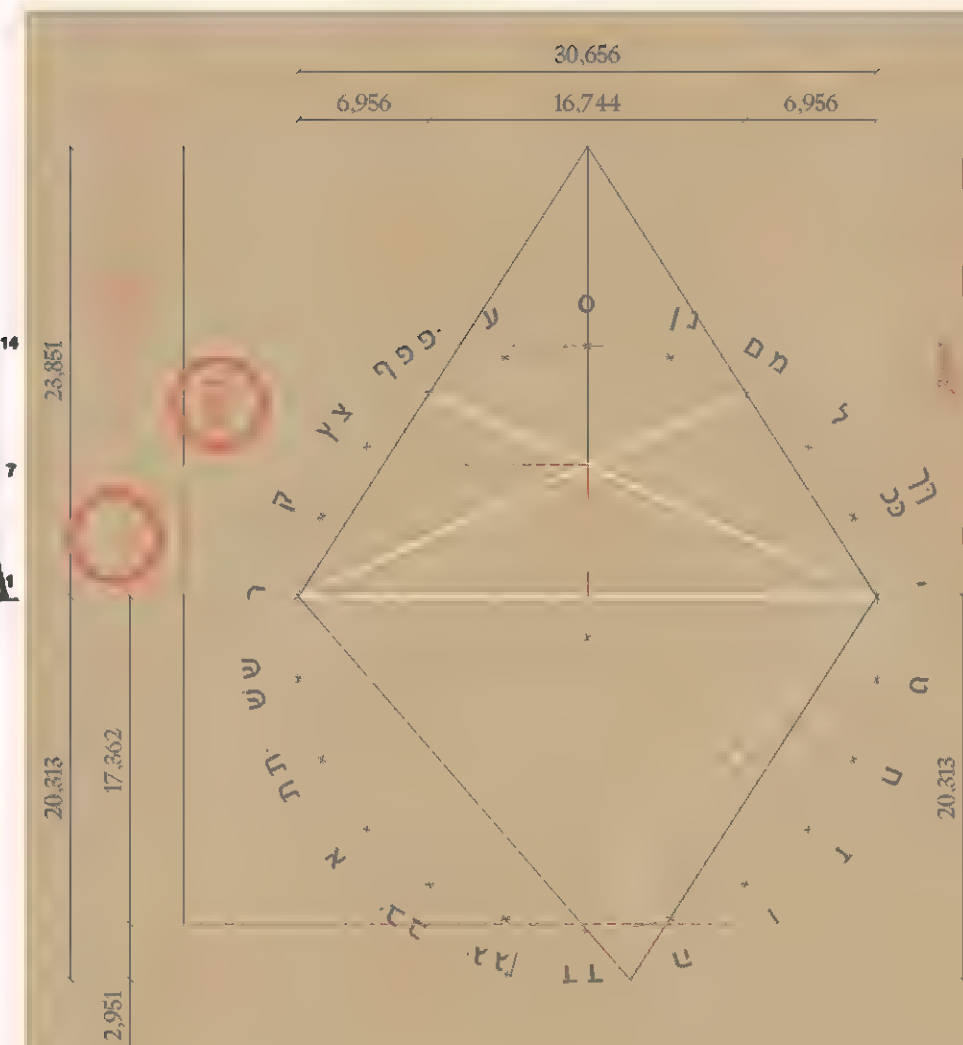
Step Pyramid of Djoser



Pyramid of Khafre



Bartlett, C. (2014). The Design of The Great Pyramid of Khufu. *Nexus Network Journal*, 16(2), 299–311 – p. 309.[online]
Available at: <https://www.academia.edu/47334550/>
Pyramid diagram extrapolated and revised from Gantenbrink (1997); b Sitting figure: King Thutmose III with an original grid drawn on a wooden board with a plaster coating, British Museum, EA 5601, sketch by author from Russmann (2001), 154 [see also (Robins 1994), 92 pl. 5.1]; c Proportions of standing figure



✠ Μιχελής (Michelis), Παναγιώτης Α. (2006).
Αισθητική Θεώρηση της Βυζαντινής Τέχνης [= 'An Aesthetic Approach to Byzantine Art']. Αθήνα: Ίδρυμα Παναγιώτη και Έφης Μιχελή

Μουτσόπουλος (Moutsopoulos), Νικόλαος (2010).
Ναοδομία [= 'Temple Building']. Θεσσαλονίκη: University Studio Press (Εκδόσεις Επιστημονικών Βιβλίων και Περιοδικών). (p.129)

Lecture of the School of Architecture, National Technical University of Athens (NTUA), Winter Semester by

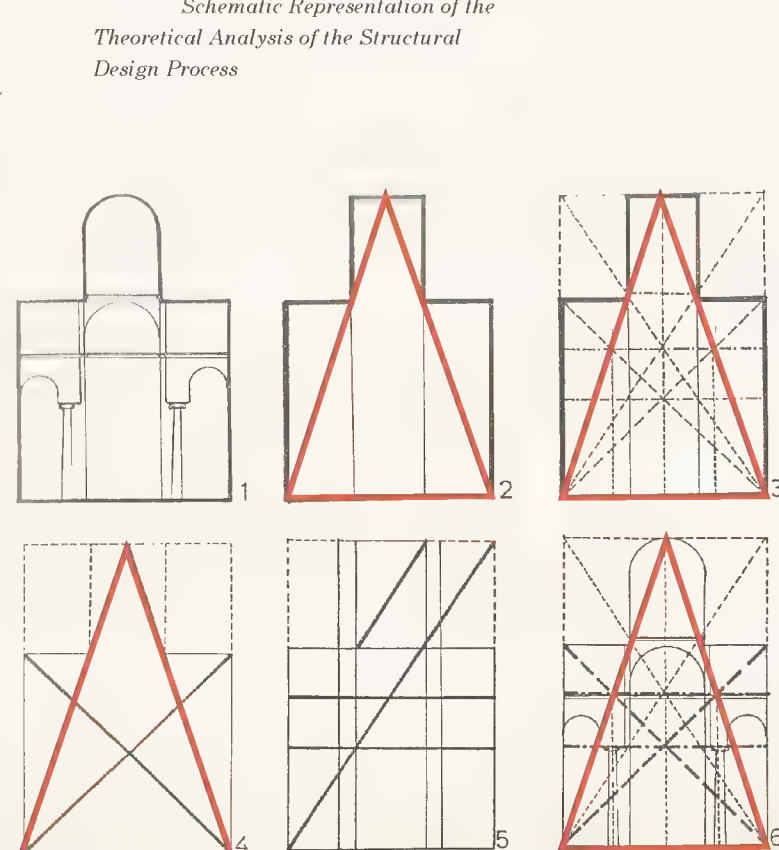
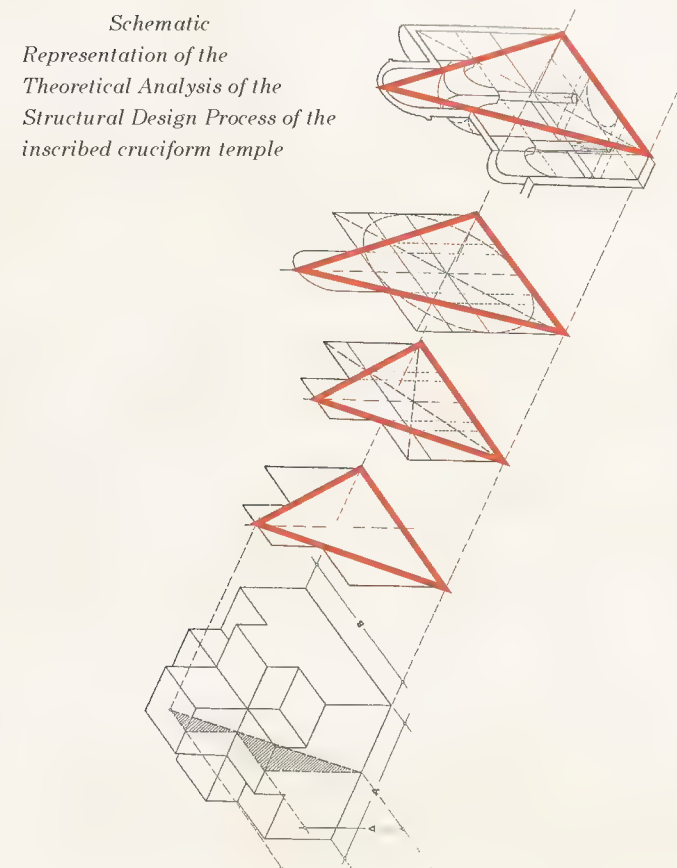
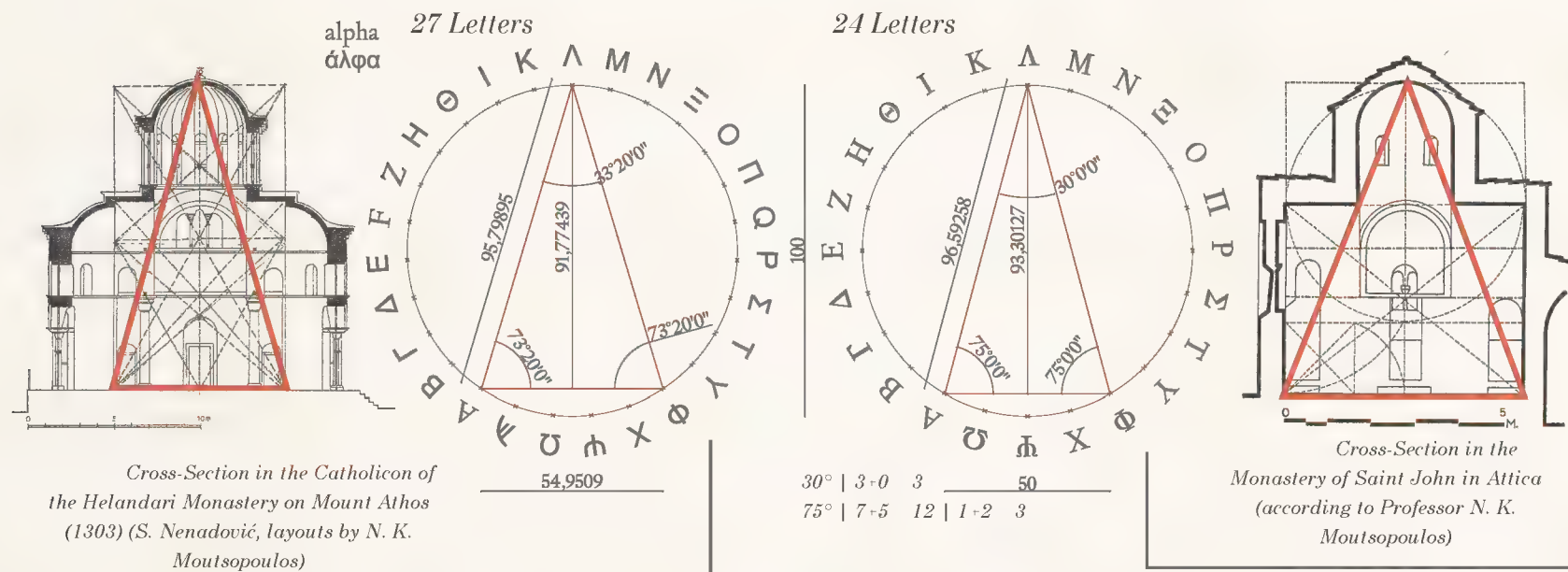
Mikraki, Manolis (2018-2019). History and Theory of the 3rd Semester.
Art during the First Christian Millennium in the East and West (slide pages 10-11)

In the case of the Greek Alphabet, a first observation concerns the letter 'Α' once it is designed within the circle of 27 letters. By examining the height-to-base ratio of the isosceles triangle, it is found that it approximates some of the corresponding ratios of church architecture from harmonic layouts (Moutsopoulos, 2010, p. 27) (sacred geometry) / structural layouts of Byzantine church architecture. More specifically, in circles with a diameter of 100 cm, the height (H) of the isosceles

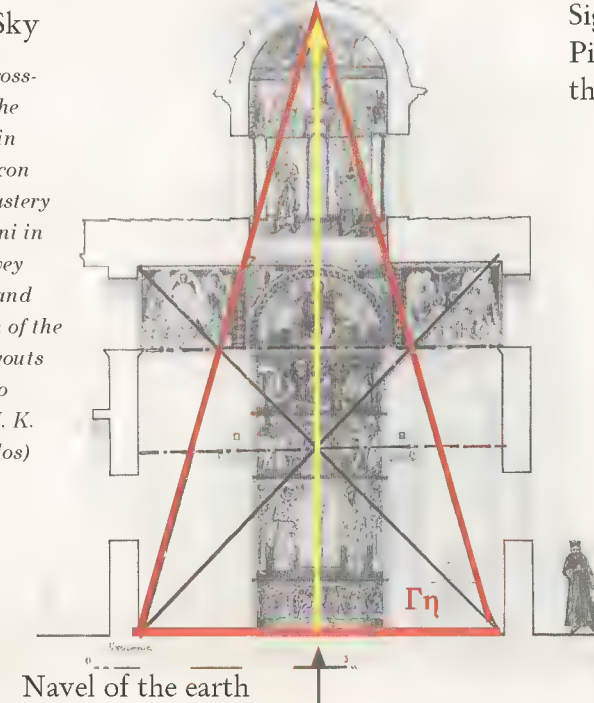
triangle is 91.77439 cm, and the base (B) is 54.9509 cm. Thus, the ratio equals 1.67012. According to the book "Temple Building" by the Emeritus Professor of Architecture and restorer N. Moutsopoulos, this ratio falls within the range (min-max) of the ratios of the structural harmonic design process of the transverse section of the inscribed cross-shaped churches of the 13th and 14th centuries AD (2.68-1.63) - the height of the dome to the internal dimension of the nave (base). (Moutsopoulos, 2010, p. 53) It is hypothesized that similar ratios might be found in ancient Greek temples, as there is an undeniable continuity between the ancient Greek spirit and Christian Orthodoxy in terms of theology (monotheism, e.g., Plato, Xenophanes), morals, and customs. However, this has not been examined. Additionally, the angle of the height of the word ALPHA approximates the size of the height angle of the isosceles triangle of the catholicon of the 'Holy Monastery Hilandar on Mount Athos' (1303). In the realm of architecture and art, the celestial divine light that flows from the dome holds a profound spiritual significance. It evokes elevated emotions among the

faithful, symbolizing the heavens (vertical axis). (Michellis, 2006, pp. 132-135) This divine light is where the Pantokrator, the God that Isaiah heard saying, "I am the first and only; and in the coming ages, I always exist" (41,4), is placed. In the theological work of the Revelation of John, the Lord says, "I am the Alpha and the Omega and encompass within myself the beginning and the end of all creation" (1,8). The letter Α, associated with the divine element, is found in the main layout of some churches, further deepening the spiritual connection.

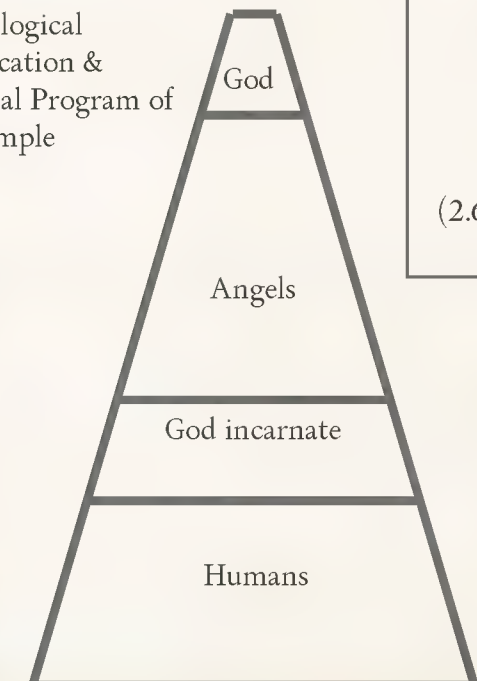
The iconographic program (hagiographies) of the Byzantine church in the transverse section (i.e., at the position of the isosceles triangle) is divided into four parts, according to its cosmological meaning. From the dome downwards are depicted God (who "observes the faithful on earth" (Michellis, 2006, p. 155)), the Angels, the Incarnate God, and finally, at the base of the church, the Saints on Earth. The vertical axis, the median of the isosceles triangle of the harmonic layout, is (symbolically) located above the navel of the Earth. (Michellis, 2006, pp. 155-156); (Panselinou, 2010, p. 141); (Mikrakis, 2018-2019, lecture). ✠



Sky
Cross-Section of the Monastery in the Catholicon of the Monastery of Kaisariani in Attica (survey from 1950 and registration of the internal layouts according to Professor N. K. Moutsopoulos)



Cosmological Signification & Pictorial Program of the Temple



Observation of base-height ratios (triangles):
(2.68 < 1.866 < 1.67 < 1.63)

Greek Alphabet		Inscribed cruciform temples of the 13th and 14th c. A.D.	
24 Letters:	$\frac{93.30127}{50} = 1.866$	dome height base	Ratio range = (2.68-1.63)
27 Letters:	$\frac{91.77439}{54.9509} = 1.67$	internal dimension in the nave	

GREEK ALPHABET | CIRCLE | 27 LETTERS

OBSERVATIONS

Φ Ω Σ (phōs), Φ Ω Σ (phóōs), Φ Α Ο Σ (pháos)
Φ Α Ψ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 8

† Maddison, F., Savage-Smith, E., Pinder-Wilson, R.H., & Stanley, T. (1997). *Science, Tools and Magic : Part One: Body and Spirit, Mapping the Universe. Part Two: Mundane Worlds*. Vol. 12. Oxford University Press

Shaykh Muhammad Hisham Kabbani (2010). *Question/Answer*. eshaykh.com. <https://web.archive.org/web/20111026153056/http://eshaykh.com/author/msh/>

Abu'l- Abbas Ahmad ibn Ali ibn Yusuf al-Buni al-Qurashi (n.d.). *Shams al-Ma'arif*, lit. 'the Book of the Sun of Gnosis and the Subtleties of Elevated Things'. Algeria. [Screenshot] Retrieved from <https://archive.org/details/SHAMSULMOARIFORIGINALHANDWRITTEN/mode/2up> (first published at 7th-13th c. A.C.)

In Islam, during the period from the 7th to the 13th century AD, the verses of the Qur'anic texts were translated into Architecture through functional and morphological design approaches to mosques or other buildings (Ettinghausen et. al, 2001: 6, 183, 199, 246).

The general idea that the letters of the Arabic alphabet possess magical occult powers is encapsulated in the Islamic grimoire '*Shams al-Ma'arif*.' This treatise was written in the 13th century in Algeria by a scholar. The grimoire focuses on Arabic magic and serves as a manual for achieving inner spirituality. (Maddison et al., 1997: 65) Some Sufi orders have occasionally recognized its potential spiritual value, provided the reader comprehends it. (Shaykh Muhammad Hisham Kabbani, 2010) On one of its pages, concentric circles with Arabic letters placed in alphabetical order are depicted (see image on the right). ‡

† Ettinghausen, R., Grabar, O., & Jenkins, M., 2001. *The Art and Architecture of Islam 650-1250*, 2nd ed. Yale University Press, New Haven (USA).

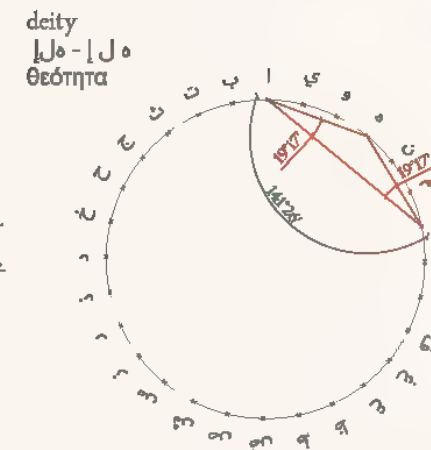
Burckhardt T. (2009). *Art of Islam: Language and Meaning World Wisdom*. Commemorative edn. Bloomington, Indiana: World Wisdom, Inc.

In the 17th century AD, the Taj Mahal was constructed, a testament to integrating literary writing into architecture. The mausoleum embodies

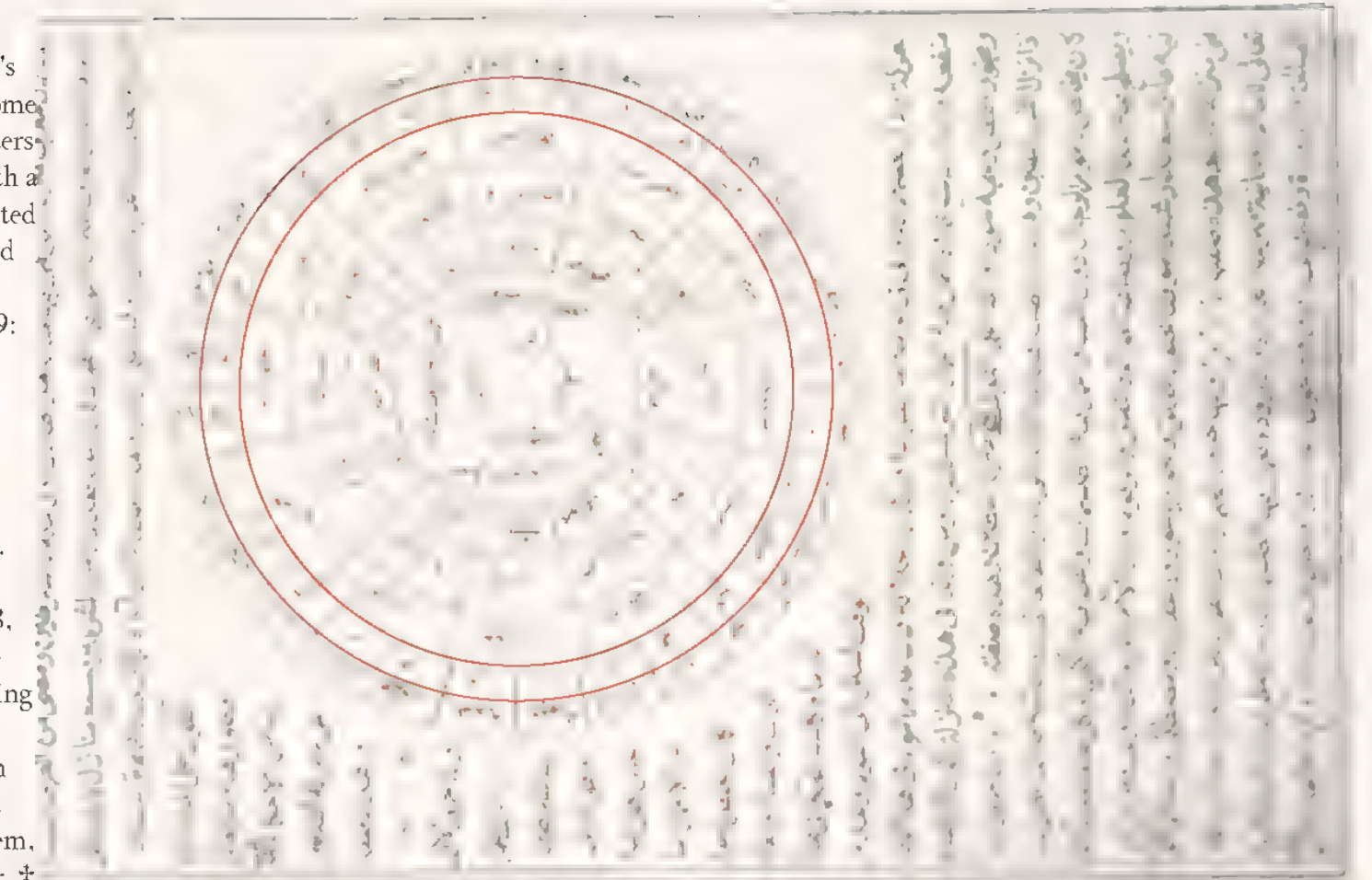
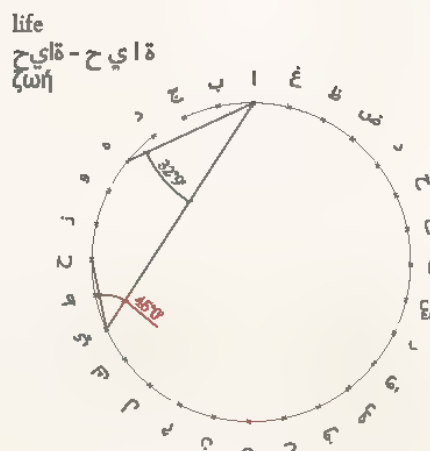
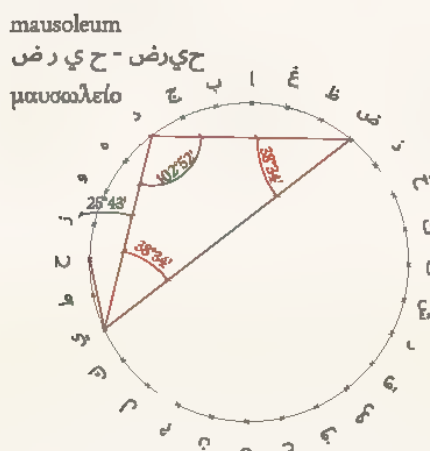
a specific literary and philosophical concept derived from the Prophet's descriptions of Paradise. The reference evokes the image of a grand dome reminiscent of a white pearl, supported by four pillars bearing the letters of the Divine Name' the Most Merciful' (ar-Rahmān): R, H, M, N, with a river of grace flowing from each letter. This literary reference, translated into architectural form, underscores the interplay between writing and mystical creation, transforming the monument into an architectural wonder and a literary one. (Burckhardt, 2009: 197) (Burckhardt, 2009: 197). ‡

† The Arabs extensively studied Aristotle during the Islamic Golden Age (8th to 14th centuries), translating many of his works into Arabic. At this period marked a significant intellectual revival, with scholars eager to preserve the knowledge of ancient civilizations. Below, you will read excerpts from Aristotle and an observation I linked to the Fibonacci sequence in one of his texts (on pages 3, 20, 38, 39, 46). It is unclear to what extent Aristotle's excerpts influenced the Fibonacci sequence or if they followed their ancient traditions regarding the production of meanings from geometric shapes. There is likely a synthesis of various traditions or even the creation of new concepts in their unique way. There is a relative convergence among cultures that use shapes to express the sacred as they explore everything around them, arriving at similar conclusions because structures have a finite number. ‡

Arabic letters usage in Literary Arabic (Hijā'ī)

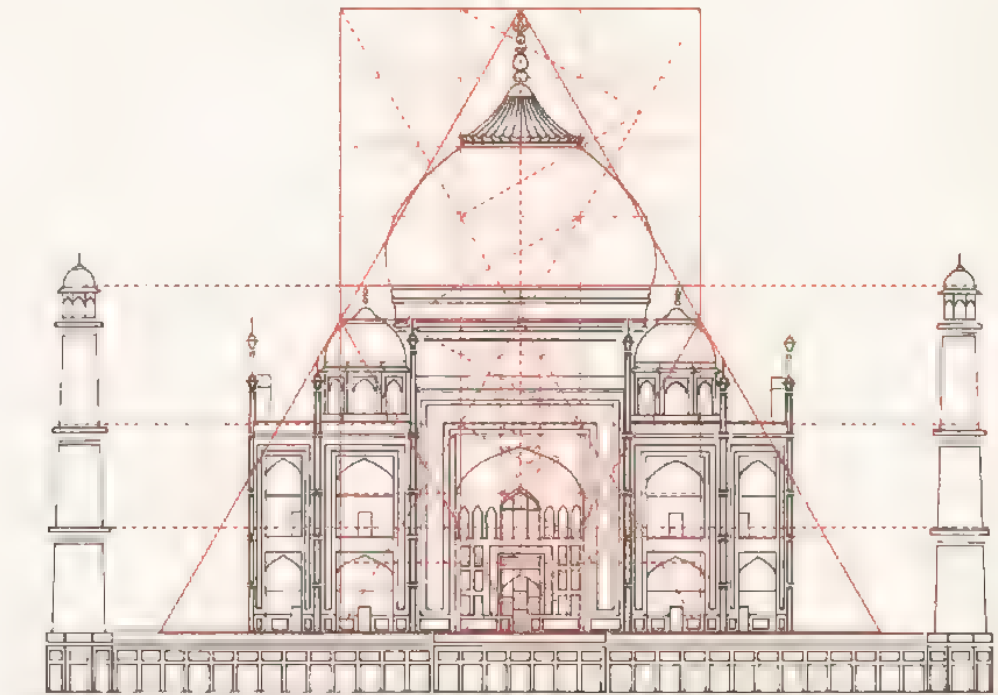


The order of Arabic letters (Abjad numerals) as ordained according to the regular development of the values of the alphabetic number-system of eastern Arabs 2000 α 249 261



Top right image: "*Shams al-Ma'arif*," literal title of the Arabic treatise 'the Book of the Sun of Gnosis and the Subtleties of Elevated Things'

The serene harmony of compositions such as that of the Taj Mahal is achieved by a carefully calibrated system of geometrical relationships illustrated here by Paul Marchant, Director of Education at The Prince's School of Traditional Arts



GREEK ALPHABET | CIRCLE | 27 LETTERS

OBSERVATIONS

Φ Ω Σ (phōs), Φ Ο Ω Σ (phóōs), Φ Α Ο Σ (pháos)
Φ Α Ψ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 9

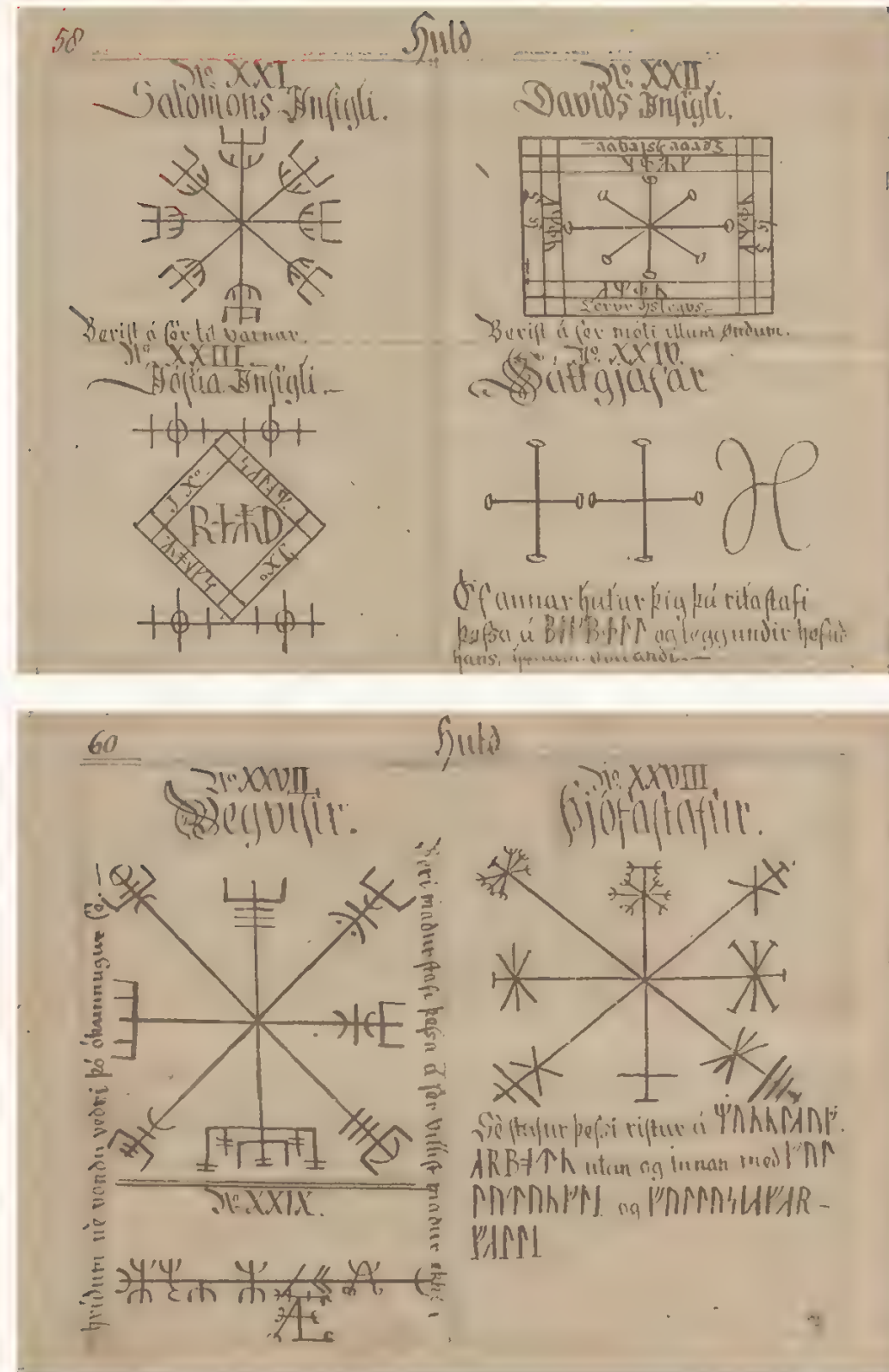
† Geir Vigfússon of Akureyri (1860).
Huld Manuscript. Remastered Edn of ÍB 383
4to / Hdrs. Í. Bmf. Nr. 383. 4to. Galdrastafir
Icelandic Manuscript. p.58-60. [online]
Available at: https://booksofmagick.com/wp-content/uploads/2020/09/Huld_I%CC%81B_383_4to.pdf
Unknown (1600/1989). *The Galdrabók: an Icelandic grimoire*. Edited, Translated, and Introduced by Stephen E. Flowers. YorkBeach, Maine: Samuel Weiser, Inc. [online] Available at: <https://archive.org/details/GaldrabokAnIcelandicGrimoire1/page/n67/mode/2up>

The Vegvisir is an Icelandic magical sigil intended to help the bearer navigate difficult weather conditions.

Two sources mention the Vegvisir: the *Huld Manuscript* compiled by Geir Vigfússon in 1860 and the *Galdrabok*, another manuscript essentially a grimoire - "a handbook of magic."

On page 58 of the *Huld Manuscript*, a captivating abstract image of the Vegvisir comes to life. Rune phrases are meticulously arranged in a rectangle, encircling successive points of an imaginary elliptical shape.

In the Icelandic grimoire *The Galdrabok*, a circular protection symbol appears with some phrases written around it circularly. ‡



62

THE GALDRABÓK

9. To cause fear in an enemy

If you want your foe to be afraid of you whenever he sees you, ther carve these staves on an oak branch⁶ and wear it in the middle o your breast—and see to it that you see him before he sees you



10. To get one's wish fulfilled

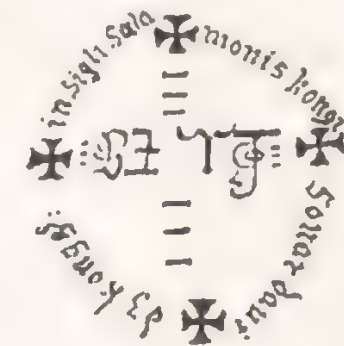
Read this verse three times forward and three times backward and you will get the outcome that you want.

Forward: Sprend manns Hoc, fljide tuui boll⁷

Backward: Boll tuui fljide, Hoc manns Sprend⁸

11. Against the hate and poison of fiends and enemies

Whoever carries the following sigil on himself will never be harmed by any of the Fiend's temptation, and his enemy wil not be able to work any active hate against him. Nor will he be exposed to any poison in his food or drink, and he will neve fall victim to any treacherous dealings.



† These types of texts, unique to the Northern Germanic and Scandinavian traditions, are a testament to the distinctiveness of the region's culture. Manuscripts such as the '*Galdrabók*' and the '*Huld Manuscript*' are Icelandic texts containing magical formulas, spells, and symbols. The Icelanders, as well as the Scandinavian peoples in general, had a rich tradition of mystical practices and runes, which were used for protection, invocation of powers, and other purposes. It appears that the circular arrangement of letters is also present in these examples. ‡

GREEK ALPHABET | CIRCLE | 27 LETTERS | Φ Ω Σ (phôs), ΦΟΩΣ (phóōs), Φ Α Ο Σ (pháos) Φ Α Ξ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 10

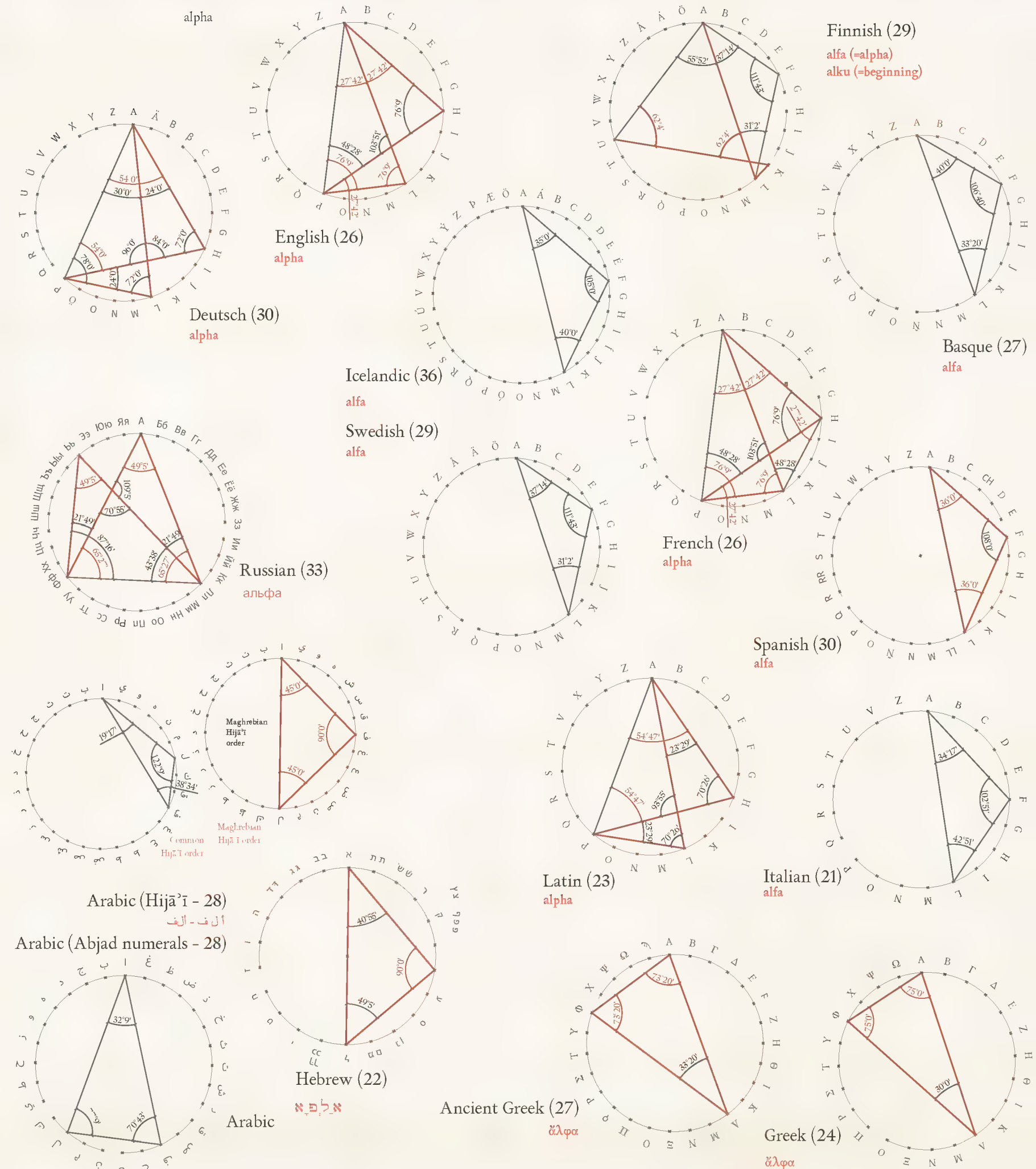
† Danesi, Marcel (2004). *Messages, Signs, and Meanings. A Basic Textbook in Semiotics and Communication*. 3rd edition. Volume 1 in the series Studies in Linguistic and Cultural Anthropology. Toronto: Canadian Scholars' Press Inc. p.107-110

From a diverse range of language families, it is selected fourteen alphabets. What is observed is the appearance of isosceles or right-angled triangles within the 14 circles. The impressive coincidence is that languages that do not belong to the same language families of the tree exhibit common geometric characteristics when writing the word ALPHA.

The geometric images, if not coincidences, seem to be silent and organized mechanisms for producing some words by unknown ancient designers with "esoteric" (for ancient times) tools over the millennia. Also, it appears through simple correlations that this silently explains a small part of the ancient philosophers' emphasis on acquiring knowledge of geometry and arithmetic. At first glance, a corresponding image in a circle requires both design applications (experience) and geometric perception. If it is an oversight in linguistics, it is due to theoretical studies and the absence of mathematical and design logic (and education). This is because scientific fields were fragmented. It seems it can extend to cultures with trade exchanges (arabesques) or military conquests, as scientific personnel (the so-called initiates) were exchanged or moved through them. Any reactions (without processing results) from linguists will follow due to the lack or absence of design and mathematical education. There is a general picture of the design of things, which Vitruvius explains very well in his 1st Book (On Architecture). It may have started in Egypt. Previously, the bibliography that documents (and partly due to dating) some of the geometric images was submitted.

Marcel Danesi (2004, p.107) writes, "The use of language in ritual is not to create new meanings, but to reinforce traditional ones and, thus, to ensure cultural cohesion. Societies are held together as a result of such verbal rituals. [...] Words in their origin were probably perceived as magical or mystical forms. Those who possessed knowledge of them were also thought to possess supernatural or magical powers."

Since sacred words organize sacred texts and are managed by individuals belonging to a closed social circle (with "secret" knowledge), they could be influenced by the logic of the design development of temples, which is based to some extent on circles. Temples are designed according to a series of geometric rules with fundamental – at first glance – geometric shapes. These harmonic shapes seem to be included in some sacred words, structuring "silently" approaches to the nature of the essence of some words, as the mystical element was evident throughout the history of human existence. Additionally, Danesi notes that writing has always been considered to have a mystical function; the ancient Egyptians called their writing system hieroglyphic (ἱερός + γλύφω/engrave) because it was used for recording hymns, prayers, names, titles of individuals and deities, and various communal activities. Generally, most scenarios for the origin of writing were thought to have sacred or mystical roots. Finally, the oldest form of writing was pictographic, consisting of drawings, which means a series of abstract geometric investigations. ‡



THE SPARK

† Ερμής Τρισμέγιστος (Hermes Trismegistus) (1990). *Ερμητικά Κείμενα (Hermetica)*. Translated and Edited by: Περικλῆς Ροδάκης (Λόγοι Ι-ΧΙΙ). Αθήνα: Παρασκήνιο. p.7-12

The Hermetica (Hermetic Texts) constitute a collection of philosophical and theological writings attributed to Hermes Trismegistus, a mythical god who combines Hermes of the ancient Greek religion and Thoth of the Egyptians. Thoth or Toth or Tat is the name of the God of Wisdom, the scribe of the gods who wrote the famous works of Egyptian Wisdom for humanity. He wrote them in hieroglyphics during the Ptolemaic period (4th-1st century BC), a script known to very few. The threefold name Thoth or Toth or Tat is rendered in Greek as Hermes, and to distinguish him, he is given the epithet Trismegistus. Thoth is considered the chief architect of Egypt's sacred and mystical monuments, the language of Ra, the main god of the holy Word, the vehicle of Knowledge, and the one who reveals the occult.

The texts of ancient Egyptian Wisdom formed the basis of the texts attributed to Hermes Trismegistus. The excerpts from the Hermetic Texts presented are recorded from the 2nd-4th century AD, transcribing the Greek spirit with terms that approach Greek philosophical thought.

They are considered works of the so-called Hermetic tradition, which focuses on the search for divine Wisdom, Knowledge, and the unity between the macrocosm and the microcosm (As above, so below). These texts cover a wide range of topics, from cosmology and theology to alchemy, astrology, and magic, expressing the belief in a world where every existence is connected to the divine and where spiritual ascension is possible through a deep understanding of the world's mysteries. The ideas contain elements of Platonism, Aristotelianism, and Stoicism, as well as strong influences from Jewish and Christian thought. In the "Gospel of John," the concept of the Word takes on the meaning it has in the Hermetic Texts, which

are older than the Christian Gospels and the Gnostics. They profoundly influenced Western mystical and philosophical thought during the Renaissance and the Age of the Enlightenment. ‡

† Copenhaver, B.P., 1992. *Hermetica: The Greek Corpus Hermeticum and the Latin Asclepius in a new English translation, with notes and introduction*. Cambridge: Cambridge University Press.

(Discourse) XII, 14. "*Reasoned speech, then, is the image and mind of god, as the body is the image of the idea and the idea is the image of the soul.*"

(Discourse) XII, 15. "*Otherwise, for all composite bodies there is a number belonging to each. For without number, neither association nor composition nor dissolution can occur. The henads give birth to number, increase it and take it back to themselves after it has been dissolved, and yet the matter is one.*"

(Discourse) XIII, 10. "*You have come to know the means of rebirth. The arrival of the decad sets in order a birth of mind that expels the twelve; we have been divinized by this birth.*"

(Discourse) XIII, 12. "*Strictly speaking, then, it is likely that the twelve retreat when the ten powers (the decad, that is) drive them away. The decad engenders soul, my child. Life and light are unified when the number of the henad, of spirit, is begotten. Logically, then, the henad contains the decad, and the decad the henad.*" My Remark: [In this passage is the theory of finding the D.R. of 10, because 1+0=1. Additionally, as a comment, since life and light are united, if life constitutes matter and light the immaterial, then light is either one of the components of the soul or is identical to the soul. Since the Hermetica accept the existence of the soul.] ‡

† Kearns, Emily (2010). *Ancient Greek Religion A Sourcebook*. Willey-Blackwell Sourcebooks in Ancient History 13. p.115

Diels, H. (1903) *Die Fragmente der Vorsokratiker*. Berlin: Weidmannsche Buchhandlung. [online] Available at: https://openlibrary.org/works/OL1310441W/Die_Fragmente_der_Vorsokratiker [Accessed 9 Apr. 2023]. p.363

Euripides (480 BC - 406 BC) strongly emphasizes the non-identification of the self with the body (the body is a temporary loan) and posits that the non-physical part (here, spirit) moves upwards rather than downwards. This concept seems to be influenced by systems such as Orphism, which places more importance on the soul, and by the Pre-Socratic theory of elements, according to which the soul, as light (or originating from fire), when freed from the body, will naturally make its way upwards to unite with lighter substances. ‡

† H.D. Diels, "*Fragmente der Vorsokratiker*", Weidmannsche Buchhandlung Publishing House, Berlin (DE), 1903. Chapter 12, Herakleitos; p.63, 70. [online]. Available at: <https://archive.org/details/diefragmenteder01krangoog/page/71/mode/2up?ref=ol&view=theater> [Accessed 09 04 2023]. ; and <https://heraclitusfragments.com/files/ge.html> ; https://www.loebclassics.com/view/hippamus-doctrine/2016/pb_LCL527.137.xml

Heraclitus declared that within the body, there is fire (which, in turn, is connected with light).

«ἄνθρωπος ἐν εὐφρόνῃ φάος ἄπτεται ἑαυτῷ ἀποθανόν, ἀποσβεσθεῖς [ὄψεις], ζῶν δὲ ἄπτεται τεθνεώτος εὐδῶν, ἀποσβεσθεῖς ὄψεις, ἐρηγορῶς ἄπτεται εὐδοντος.»

DK B26 *Man kindles a light for himself in the night-time, when he has died but is alive. The sleeper, whose vision has been put out, lights up from the dead; he that is awake lights up from the sleeping.*

«Ἰππασος δὲ ὁ Μεταποντῖνος καὶ Ἡράκλειτος ὁ Ἐφέσιος ἐν καὶ οὗτοι καὶ κινούμενον καὶ πεπερασμένον, πῦρ ἐποίησαν τὴν ἀρχήν, καὶ ἐκ πυρὸς ποιοῦσι τὰ ὄντα πυκνῶσει καὶ μανῶσει καὶ διαλύουσι πάλιν εἰς πῦρ, ὥς ταύτης μιᾶς οὐσης φύσεως τῆς ὑποκειμένης· πυρὸς γὰρ ἀμοιβὴν εἶναί φησιν Ἡράκλειτος πάντα.»

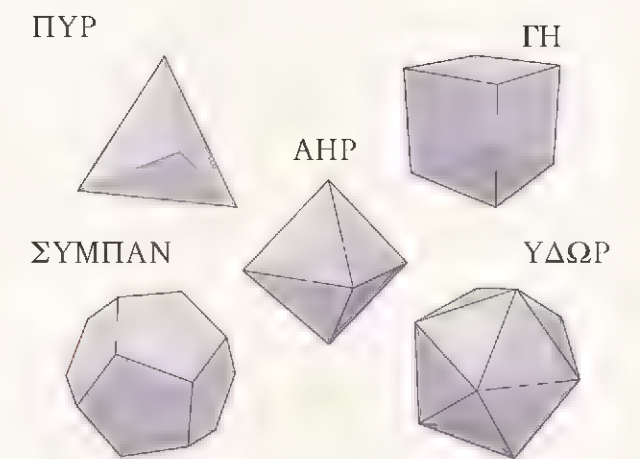
Translation: "*Hippasus of Metapontum and Heraclitus of Ephesus [scil. said] themselves too that it [i.e. the principle] is one, in motion, and limited, but they made fire the principle and explain the things that are as coming from fire by condensation and rarefaction, and they dissolve them once again into fire, on the supposition that this is the only nature that is a substrate.*" ‡

† Principe L. (2013). *The Secrets of Alchemy*, Chicago (USA): The University of Chicago Press. [online]. Available at: <https://archive.org/details/secretsofalchemistry0000prin> [Accessed 04 04 2023].

The first thinker to refer to theoretical speculations about the nature of matter and its changes is Thales of Miletus (6th century BC). Thales claimed that all different substances in the world are modifications of a single primordial substance, which he identified as water (Principe, 2013, p. 14, 61). ‡

† Plato, in his dialogue *Timaeus*, attempted to explain the hidden nature of matter and its endless transformations into new forms by presenting the so-called "*Platonic Solids*," which were included in the "secret" teachings of Pythagoras. ‡

† In Greek literature, there are no direct references connecting letters with the circle, as is the case in the Hebrew work '*Sefer Yetzirah*.' However, from the investigations of pre-Socratic writings, this issue might be addressed. ‡



† Proclus (2007). *On Plato Cratylus*. Translated by B. Duvick, edited by H. Tarrant. London: Bloomsbury Academic.

※ *The Characters* 16.3 – 22: "*Pythagoras, for instance, when asked what is the wisest being of all, said, "Number". What is second in wisdom? "He that puts the names to things".30 By "Number" he hinted at the intelligible order encompassing the multitude of the intellectual Forms.31 For there the Number that exists primarily and authentically32 was instituted after the superessential One itself. This Number also conducts the measures of essence for all that exists, and in it real Wisdom and Knowledge exist, since this Wisdom*

GREEK ALPHABET | CIRCLE | 27 LETTERS |

OBSERVATIONS

Φ Ω Σ (phô̓s), ΦΟΩΣ (phô̓ōs), Φ Α Ο Σ (phá̓os)
Φ Α Ψ Ο Σ (phawos), Φ Α Ε Ο Σ (phá̓eos) 12

exists of itself has turned back to itself and perfects itself 33 Moreover, just as intelligible intellect and intellection are the same in the intelligible order so too Number and Wisdom are there the same 34 By "He that puts the names" Pythagoras hinted at the Soul which was instituted from Intellect. The objects themselves do not exist as Intellect does in its primary way, but it contains their images and essential, processional, formative like statues of the real entities, just as names imitate the intellectual Forms, that is the Numbers 35 The being of all things therefore comes from Intellect that knows itself and is wise, but naming from Soul that imitates Intellect 36 The activity of naming, then, according to Pythagoras, belongs not to any random individual, but to one who sees the Intellect and the nature of the real entities 37 Names are therefore natural." ‡

* The Subject Matter of the Dialogue, 1 [111-118] "The purpose1 of the *Cratylus* is to describe the generative activity of souls among the lowest entities 2 and the ability to produce likenesses3 which souls since they received it as part of their essential, not demonstrate through the correctness of names. Yet, since the divine activity of souls in many places fails of its proper end4 as does their divine nature 5 names that are undefineable and circumscribe accidentally and by chance are also likely to occur" ‡

* Naming and Demurgism 51 [18.1.21-20.2.2] "Thus all the names that are applied to eternal entities are laid down by law. But since there are names of perishable objects as well, it is no wonder if universal law does not control them, but there is a good deal of the arbitrary in them, as in the case of people who are called "Ambrosius" "Athenasius" "Polychronius" and the like 110 Let us briefly discuss what the art that creates names is, for it does not include every form of the art of legislation. That there is a certain power of representation in the soul is clear, indeed painting and other such skills depend on it, since it assimilates subsequent things to elements to their superiors and the forms carried in composition to those that are simpler 111 Moreover, by the same power the soul can liken itself to its superiors, gods, angels and demons. But through the same power it likens even the beings descending to elements from itself to itself and, further, to those superior to itself. It therefore fashions images of both gods and demons. But wishing to

institute likenesses of real beings, similitudes which are in a certain way immaterial, and products of only the essence of reason, λογικὴ, and using linguistic imagination, εικτικὴ 112 as an aid, it brought forth from itself the essence of names. And as the art of "telestic" consecration through certain symbols and ineffable signs fashions the statues which are in this way like the gods and makes these statues suitable for the reception of divine illumination, 113 so too by the same power of assimilation the art of legislation institutes names as effigies of their objects, when it represents through echoes of this sort or that the nature of real beings, and having instituted them, it handed them on to men for use. For this reason, the lawgiver is said to be an authority on the generation of names, and, just as it is not relevant to transgress against the statues of the gods, so it is not holy to do wrong regarding names. For the legislative demurge of names is Intellect, which instills images of their models in them. And we must revere them, so the names, because of their so the models, kinship to gods. Now, it seems to me that Plato sets up the lawgiver as a figure analogous 114 to the universal Demurge, for according to *Timaeus* it is the Demurge who sets the "unutterable laws" 41E and "ordains all things" 42D, and "who is attended by Fate, the nemesis of anyone who departs from the divine law," as the Athenian Stranger says (Laws 716A-115). It thus seems to me that Plato reasonably grants the lawgiver the creation of names as well, since the universal Demurge, he says, is also the primal name-giver. It therefore is He, as *Timaeus* says (36C), that named one of the revolutions "the Same" and one "the Other" " ‡

† Proclus 1987, *Commentary on Plato's Parmenides*. Translated by G.R. Morrow and J.M. Dillon, with Introduction and Notes by J.M. Dillon. Princeton: Princeton University Press.

* BOOK I [669.29–669.36] "But I admire even more Plato's skill in preserving throughout the likeness between his narrative and realities. For souls that are going to someone to be improved by him must first be likened with him through knowledge and reflection. For knowledge comes first, then the approach, and then the union.*** For no one can be united with another whom he cannot approach, nor can he draw near to that which he does not know." ‡

* BOOK I [670.5–670.9] "the souls that are being led must first of all be likened with the objects of their desire through knowledge and attention of which the learning of the name is an image, for names are the product of the cognitive part of the soul." ‡

† Proclus 2010, *On the Theology of Plato*. Translated by T. Taylor, with an additional seventh book from collected material. Electronic edition: Proclus *Diadochus*.

* BOOK I, CHAPTER XXIX [124.12–125.2]

"For as the demiurgic intellect establishes resemblances about matter of the first forms contained in himself and produces temporal images of things eternal, assimilable images of things non-assimilable and assimilated images as it were of true beings, after the same manner I think the science that is with us representing intellectual production fabricates resemblances of other things, and also of the Gods themselves, representing that which is void of composition in them through composition, that which is simple through variety, and that which is white through multitudes, and thus fashioning names intimately exhibits images of divine natures. For it generates every name as if it were a statue of the Gods. And as the theurgic art through certain symbols calls forth the exuberant and unending, ringed goodness of the Gods into the illumination of artificial statues, thus also the intellectual science of divine concerns, by the compositions and divisions of sounds, unfolds the occult essence of the Gods." ‡

† Gersh, S. 1978, *From Iamblichus to Eriugena: An Investigation of the Prehistory and Evolution of the Pseudo-Dionysian Tradition*. Studien zur Problemgeschichte der antiken und mittelalterlichen Philosophie, 8. Leiden: Brill.

Excerpta ex Nicomacho p. 276, 8 Jan, [6.1.6.20] "And the tones of the seven spheres, each of which by nature produces a particular sound, are the sources of the nomenclature of the vowels. These are described as unpronounceable in themselves and in all their combinations by wise men, since the tone in this context performs a role analogous to that of the monad in number, the point in geometry, and the letter in grammar. However, when they are combined with the

materiality of the consonants just as soul is combined with body and harmony with strings, the one producing a creature, the other notes and melodies, they have potencies which are efficacious and perfective of divine things. Thus whenever the theurgists are conducting such acts of worship they make invocation symbolically with hissing, clucking, and inarticulate and discordant sounds. Because those who employ the seven-tone harmony as natural took it from there, not from the spheres themselves, but from the harmonious sounds inherent in the universe, which make a voice and articulate sounds, the only ones among the elements." ‡

† Proclus, *A commentary on the first book of Euclid's Elements* [95.21–96.15]

«Ἐπει δὲ καὶ οἱ Πυθαγόρειοι τὸ σημεῖον ἀφορίζονται μονάδα προλαβοῦσα, θέσι, σκεπτέον τι ποτε σοί, ντες λέγουσι, ὅτι μέ, οὐ, οἱ ἀριθμοὶ τῶ, μεγεθῶ, ἀιλότεροι καὶ καθαρώτεροι καὶ ὅτι τῶ, ἀριθμῶ, ἡ ἀρχὴ τῆς τῶ, μεγεθῶ, ἐστι, ἀπλουτέρα παντὶ καταρατές, ἀλλ' ὅτα, λέγουσι τῇ, μέ, μονάδα θέσι, ἔχουσα, ἐνδείκνυσθαι μοι δοκοῦσι, ὥς ἂρα ἡ μέ, μονάς καὶ ὁ ἀριθμός ἐ, δόξη τῇ, ὑπόστασι, κέκτηται, λέγω δὲ τὸ, μοναδικό, ἀριθμό, διό καὶ τῶ, ἀριθμῶ, ἕκαστος εἷς ἐστι, οἶο, ὁ πέντε καὶ ὁ ἑπτὰ καὶ οὐ πολλοὶ καθ' ἑκάστη, ψυχῇ, καὶ σχήματος καὶ μορφῆς ἐπεισοδιωδούς καθαρνευοὺσι τὸ δὲ σημεῖο, ἐν φαντασίᾳ προτεινεται καὶ οἶο, ἐ, τῷ τῶ, γερονε, καὶ ἐν λό, ἐστι κατὰ τῇ, σορητῇ, ὅλην, ἀθετος αὐ, ἡ μονάς ὥς ἄιλος καὶ παντός, ἔξω διαστήματος καὶ τόπου, θέσι, δέχει τὸ σημεῖον ὥς ἐ, τοῖς φαντασίας κόλποις ἰσθιλλόμενοι καὶ ἐν λόγοι, διὰ δὲ τῇ, κοιωλαν τῶ, ἀρχῶ, καὶ ἡ μονάς στιγμῆς ἀπλουτέρα, κατὰ γάρ τῇ, θέσι, ἐπλεόνασε, ἡ στιγμὴ τῆς μονάδος αἱ δὲ προσθέσεις ἐ, τοῖς ἀσωμάτοις ὑφέσεις ἀπο τελοῦσι τῶν, τὰς προσθήκας δεχομένων»

Translation: "The Pythagoreans define the point as a unit that has taken position [] When they say that the unit has a position, it seems to me that they indicate that the unit and number, and I mean the abstract number, have taken their substance within the belief. Therefore, every number is one, for example, five and seven, and not many in every soul, and they are pure from shape and form. However, the point is projected in the imagination and has been found, we could say in some place and is material, naming the intelligible matter. Thus, the unit does not have a position because it is projected in the bosom of the imagination and is material. Due to its communication with the principles, the unit is simpler than the point. For the point, having a position, has something more than the unit. And the additions to the incorporeal constitute aggregations of those that accept the additions." ‡

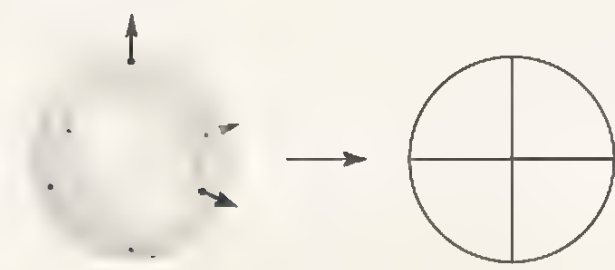
† 8th–7th century BC: The transformation of one state—such as a mental construct—into another—that is, into something existent—is implied by Homer in his Hymns or by Hesiod in the poem Theogony, in which the fundamental elements are gradually transmuted through successive transcendent births. ‡

† Diels, H. (1903) *Die Fragmente der Vorsokratiker*. Berlin: Weidmannsche Buchhandlung. p. 44, 144, 171, 247, 254, 290, 361, 496) [online] Available at: https://openlibrary.org/works/OL1310441W/Die_Fragmente_der_Vorsokratiker [Accessed 9 Apr. 2023]

The Pre-Socratic doctrines connect the Sphere "with the concepts of God and the Whole," as mentioned by Xenophanes, Parmenides, Pythagoras, Empedocles, Leucippus, Democritus, and Musaeus. God is the Creator of all things and exists within everything. ‡

† In Euclidean Geometry, the circle represents the trace of the sphere's circumference in the two-dimensional world. Since the God of the Pre-Socratics is the sphere in the three-dimensional world, in a two-dimensional world, God is the circle, which implies the representation of His perception in the "realm of the two-dimensional world." Everything placed within the circle describes the Universe. Everything is part of Him, and He Himself is everywhere as the sum of the parts. ‡

† In Euclidean Geometry, a circle with a cross implies the two-dimensional design of a sphere, while in the Greek alphabet, it denotes the letter 'Theta' = Θ . ‡



† The propositional composition through equivalence and implication, with the substitution and additions of common Pre-Socratic views, seems to imply the circle as a fundamental mystical tool used for the production of some words and the structure of philosophical discourse. ‡

† H.D. Diels, "Fragmente der Vorsokratiker", Weidmannsche Buchhandlung Publishing House, Berlin (DE), 1903. Chapter 12, Herakleitos; p.60, 71, 86. [online]. Available at: <https://archive.org/details/diefragmenteder01krangoog/page/71/mode/2up?ref=ol&view=theater> [Accessed 09 04 2023].

HIPPOCRATES OF COS, *Regimen* 1, 39–41. [online]. Available at: https://www.loebclassics.com/view/hippocrates_cos-regimen_i/1931/pb_LCL150.247.xml

HERACLITUS, *Testimonia*, Part 3: Reception (R). EARLY GREEK PHILOSOPHY III. [online]. Available at: https://www.loebclassics.com/view/heraclitus-reception/2016/pb_LCL526.291.xml

«ἐνὶ δὲ λόγῳ πᾶντα διεκοσμήσατο κατὰ τρόπον αὐτὸ ἐόντῳ τὰ ἐν τῷ σώματι τὸ πῦρ, ἀπομίμησιν τοῦ ὅλου, μικρὰ πρὸς μεγάλα καὶ μεγάλα πρὸς μικρά»

"In a word, all things were arranged in the body, in a fashion conformable to itself, by fire, a copy of the whole, the small after the manner of the great and the great after the manner of the small."

Heraclitus' reference to "small towards large and large towards small" suggests a harmonic correspondence (analogy) between the various sizes and dimensions of existence, highlighting the idea of the relationship between the macrocosm and the microcosm.

This idea reflects a fundamental principle of many philosophical and mystical traditions, which see the Universe as a single, harmoniously structured whole, where every part reflects and

contains elements of the whole. This relationship of "as above, so below" (a quote from Hermetic philosophy) is fundamental to the inquiry into the nature and place of man within it.

"[3] And the fact that he taught that this one is generated and perishable is indicated by the following words: "Turnings of fire: first sea [. . .] and the other half, lightning storm" [D86]. [4] For he is saying potentially that fire, under the effect of [Logos] and God who directs the totality of things, turns, passing through air, into moisture which is like the seed of the organization of the world, which he calls the sea; and out of this then comes the earth, the heavens, and everything that it encompasses. [5] But the fact that it is regenerated and undergoes conflagration he shows clearly in the following words: "It spreads out as sea [. . .] it became earth" [cf. D86]. The same applies in a similar way to the other elements."

This passage indicates that:

(I) {Fire, governed by the Logos and God, transmutes into successive states of matter.}

Additionally, from his philosophical position, "the small after the manner of the great and the great after the manner of the small," the shapes of the letters (which prevail) in the words "Logos" and "God" are considered, namely Greek 'omicron' = O and Greek 'theta' = Θ .

Theta, Θ , represents the sphere in two dimensions. Some pre-Socratic philosophers agree with the description of the Whole or God as a sphere. For Heraclitus, there is no passage that explicitly states this. However, his phrase "as above, so below" in conjunction with geometry could produce this interpretation, provided Heraclitus possessed knowledge of geometry. In ancient Greece, geometry and mathematical thought, in general, were closely linked with philosophy and the effort to understand the world. This is evident from the presentation of Platonic Solids in Plato's Timaeus, which belonged to Pythagoras' "secret"

teachings. Pythagoras (570–495 BC) attributed Fire to a tetrahedron, that is, a pyramid with a triangular base.

According to the above, through the substitution of lexical terms with equivalences and implications, the following emerge:

- «Sphere» ↔ «God» ↔ «Sphere» → «Circle», and
- «Fire» → «Three-dimensional forms» → [«Two-dimensional forms» ↔ «Two-dimensional lines»] (because Fire transmutes successively into the forms of the Universe, which can also be depicted two-dimensionally)
- «Logos» ↔ «Writing» ↔ «Letters»
- «successive states of matter» ↔ «successive geometric states»

From the relationships (a), (b), (c) & (d), Heraclitus' position (I) is reformulated through implication as follows:

(II) [The «Two-dimensional lines» governed by the «Letters» and the «Circle» transmuted into «successive geometric states»] ‡

† H.D. Diels, "Fragmente der Vorsokratiker", Weidmannsche Buchhandlung Publishing House, Berlin (DE), 1903. Chapter 12, Herakleitos; p.101–102. [online]. Available at: <https://archive.org/details/diefragmenteder01krangoog/page/71/mode/2up?ref=ol&view=theater> [Accessed 09 04 2023].

Philip Wentworth Buckham (1827), *Theatre of the Greeks*. p.164
Pickard-Cambridge, A.W. (1927/1962) *Dithyramb, Tragedy, and Comedy*. Reprint, Oxford: Clarendon Press. Original edition. p. 232

The Pythagorean Epicharmus (550–460 BC) mentions the following:

«ὁ λόγος ἀνθρώπους κυβερνᾷ κατὰ τρόπον σώζει τ' αἰεὶ [εἶ]. ἔστιν ἀνθρώπῳ λογισμός, ἔστι καὶ θεῷ λόγος· <ὁ δέ γε> τᾶνθρώπου

GREEK ALPHABET | CIRCLE | 27 LETTERS |

OBSERVATIONS

Φ Ω Σ (phôs), Φ Ω Σ (phóōs), Φ Α Ο Σ (pháos)
Φ Α Ψ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 14

πέφυκεν <ἀπό γε τοῦ θείου λόγου, καὶ φέρει
πόρους ἑκάσται> περὶ βίου καὶ τᾶς τροφᾶς.
ὁ δέ γε ταῖς τέχναϊς ἀπάσαις συνέπεται θεῖος
λόγος, ἐκδιδάσκων αὐτὸς αὐτοῦς, ὃ τι ποιεῖν
δεῖ συμφέρον. οὗ γὰρ ἄνθρωπος τέχνην
τιν' εὔρεν, ὃ δὲ θεὸς το πᾶν. [φέρει. ὁ δέ γε
τάνθρωπου πέφυκεν ἀπὸ γε τοῦ θείου λόγου]

(III) "Translation: {The divine word [...] accompanies all arts, teaching people what to do for the common good. [...] Human reasoning comes from the divine word.}"

According to the above, through the substitution of lexical terms with equivalences and implications, the following emerge:

- «Divine Logos» ↔ «The Word of God» & («God» ↔ «Sphere» → «Circle») → «The Word within the Sphere» (in a three-dimensional view) → «The Word within the Circle» (in a two-dimensional view)
- «All arts» → «Writing» (as an expressed art) → «Written language» (when writing records human language) → «Alphabet letters» (letters as the expression of an art form and recording of sounds)
- «Human reasoning» → «Expressed in words» → «Human language» → «Expression of some sounds with letters as the "smallest" parts of words»
- «The divine word» ↔ «The Word of God» → «This Word is within the framework of "the sphere or the circle," from (c)»
- «The letters of the alphabet create an endless repetition when written linearly from their beginning to their end» → «This repetition will be represented by the circle, because the circle denotes the concept of movement in an endless repetitiveness»

From the relationships (c), (f), (g), (h) & (i), Epicharmus' position (III) is reformulated through implication as follows:

(IV) {The «Word within the circle» [...] accompanies the «letters of the alphabet» [...] The «expression of some sounds with letters as the "smallest" parts of words» comes from «this Word

that is within the framework of the circle.»} ‡

† Copenhagen, B.P., 1992. *Hermetica: The Greek Corpus Hermeticum and the Latin Asclepius in a new English translation, with notes and introduction*. Cambridge: Cambridge University Press.

(Discourse) VI: "Participation in all things has been given in matter." ‡

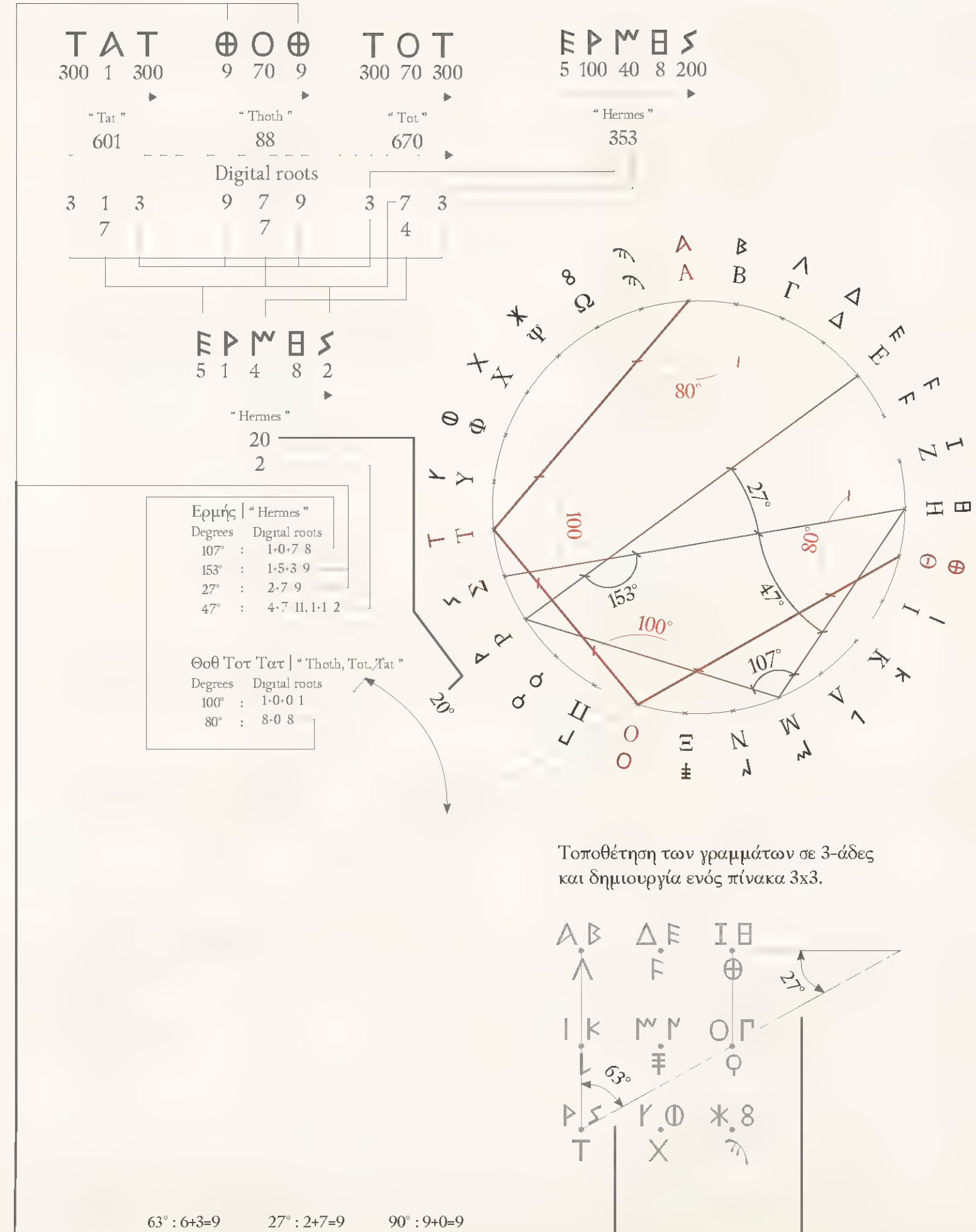
† Copenhagen, B.P., 1992. *Hermetica: The Greek Corpus Hermeticum and the Latin Asclepius in a new English translation, with notes and introduction*. Cambridge: Cambridge University Press.

(Discourse) XVI: [1.] "it will be entirely unclear (he said) when the Greeks eventually desire to translate our language to their own and thus produce in writing the greatest distortion and unclarity. [2] But this discourse, expressed in our paternal language, keeps clear the meaning of its words. The very quality of the speech and the (sound) of Egyptian words have in themselves the energy of the objects they speak of. [...] We, by contrast, use not speeches but sounds that are full of action." ‡

† The ultimate origin of the *Hermetic Texts* is lost in pharaonic Egypt. The name of the mythical god is also mentioned in the Egyptian "Book of the Dead" (1550 BC), which is said to be the work of Thoth himself.

Egypt utilized the shape of the triangle to express the divine element and wisdom. When the names of Hermes Trismegistus, Thoth-Tot-Tat (the name of the God of Wisdom) are drawn in the circle, the production of an isosceles trapezoid and, consequently, an isosceles triangle is observed. ‡

† The relationships (III) and (IV) emerge from a philosophical, theological, and poetic cultural framework (cultural semiosphere). The ideas presented are theological and philosophical, internally consistent, and reflect part of the ancient understanding of man and God.



Metaphorical and symbolic values are used by many philosophers who agree on the existence of implicit correlations, under which ideas are shaped and knowledge evolves through a system of "secret" teaching (not accessible to the general public). Thoth ('ΘΘΘ' or 'ΘΩΘ') éhas a prominent role because he is referred to as the protector of Letters (Plato, Phaedrus. 243e–247c), and his letters in Greek are composed of circles. Phonetically, as Erasmus mentions, the omega does not differ from the omicron except in its long value. Therefore, the simplest form is investigated. The reasoning follows a deeper connection between symbolism, language, and the cosmological understanding of the world. These concepts are presented in hieroglyphic writing and are transmitted over the centuries into alphabetical writing.

The implications seem logically correct and coherent within the symbolic and philosophical framework. They express a symbolic and metaphysical approach to understanding matter, the world, and the divine dimension through geometry, arithmetic, writing, and philosophical thought. ‡

† The geometric knowledge of the time and the inability to accurately calculate the area of the circle ($A=\pi \cdot R^2$) seem to have led to the association of God with the circle. Since the number π (3.14...) is irrational, meaning it has infinite periodic digits. The association of God with the circle through the number π can be interpreted as a metaphor for infinity and the inability to fully understand or represent the divine element, both with human means and in the simplest way. The infinite nature of π symbolizes the concept of the limitless and the inexplicable qualities often attributed to the divine. ‡

† The Greek word ΘΕΟΣ uses two circles to describe the phonetic sequence of this idea/position. Below are translations of the word in various languages:
Italian=«DIO», Spanish=«DIOS», English=«GOD», German=«GOTT», Russian=«Бог (Bog)», Ukrainian=«Бог (Boh)», Tagalog=«Diyos»,

Serbian=«Бог (Bog)», Bulgarian=«Бог (Bog)», Polish=«Bóg», Czech=«Bůh», Slovak=«Boh», Croatian=«Bog», Arabic = ﷲ, Korean= 하나님, Icelandic=«goð», Khmer= ព្រះវិស្ណុ, Navajo=«Diyin Ayóo Át'éii», Tajik=худо, Tatar=ходай, Zulu=inkosi, Basque=jainkoa, Sanskrit=देवता.

Εφορμώντας από μια σχεδιαστική παιδεία, ένα πρώτο σχόλιο είναι η διαχρονική εμφάνιση του γράμματος από διαφορετικά πολιτισμικά πλαίσια, τα οποία ίσως φαίνεται ότι κατανοούν την μεταφορική γεωμετρική διάσταση του κύκλου με την φιλοσοφική της προέκταση.

A second comment: during the continuous articulation of the Greek 'omicron' (O), an imaginary circle is created with the lips, which, when observed carefully by a designer, would then depict it with a circle and might be defined by convention once accepted by the other community members. This process of symbolic representation, when received by the community, carries more profound meanings and becomes a part of the cultural framework. If this unknown designer (or several unknown designers) over the centuries holds a prominent social position and sufficient knowledge of geometry (mathematics), they would have greater ease in the process of depiction and developed observance compared to the common person organizing meanings within a cultural framework.

Additionally, this imaginary circle is encountered in the first dwelling of primitive man (circular hut), in the arrangement of the position of a group of people (from primitive times to the present) around a fire/hearth, and on the circular (primeval, sacred, and non-sacred) dances. In the collective unconscious, it is natural to associate the circular element with the concept of sacredness since social gathering is a vital element for the framework of a city, village, etc.. It will necessarily be associated with high significance.

Rightly so, as an architect, I believe that the letter omicron was possibly designed under a cultural framework of social fermentations



accompanied by "silent" meanings and non-teachable philosophical interpretations to the general public. At the same time, it was rendered twice in the word ΘΕΟΣ (=GOD) with a design insight, as is the case in other languages. ‡

† Copenhaver, B.P., 1992. *Hermetica: The Greek Corpus Hermeticum and the Latin Asclepius in a new English translation, with notes and introduction*. Cambridge: Cambridge University Press.

(Discourse) XIII, 17: "Let god's immortal circle attend my discourse." ‡

† Danesi, M., 2004. *Messages, Signs, and Meanings: A Basic Textbook in Semiotics and Communication*. 3rd ed. Studies in Linguistic and Cultural Anthropology, Vol. 1. Toronto: Canadian Scholars' Press Inc. p.113

«Alphabetic writing has become the norm in many cultures. But in every alphabetic sign, there is a pictographic history and prehistory similar to the one described above for the letter A. The pictographic content of our letters goes unnoticed because our eyes are no longer trained to extract pictorial meaning from them..»

† Rogers, Henry (2005). *Writing System. A linguistic approach*. Victoria (AU): Blackwell Publishing. p.119. ‡

Egyptian hieroglyphic	Sinai script	Early Semitic	Name of letter
			ʾaleph 'ox'
			bet 'house'
			waw 'hook'
			kaph 'open hand'
			mem 'water'
			nahas 'snake'
			ʾajin 'eye'

Figure 7.2 Some examples of the Egyptian sources of Semitic letters according to Gardiner (1916) and Albright (1966)

† Halpern, Steven (2010). *Steven Halpern Great Pyramid OMs Cymatics*. [online, YouTube video] Available at: <https://www.youtube.com/watch?v=Yw13EAX3cZk>

From the Chladni Plate experiment, during the prolonged articulation of the Greek letter 'omicron,' the formation of two circles is observed on the vibrating plate (through the point movement of sand grains).



† Copenhaver, B.P. (1992). *Hermetica: The Greek Corpus Hermeticum and the Latin Asclepius in a new English translation, with notes and introduction*. Cambridge: Cambridge University Press.

(Discourse) VIII, 3: "And the father {took the matter that he desired} to set aside and made it all into a spherical form with body and bulk. The matter that he invested with this spherical quality is immortal, and its materiality is eternal. Further, the father implanted in the sphere the qualities of forms, shutting them up as in a cave. He wanted to adorn what comes after him with every quality" ‡

† Copenhaver, B.P., 1992. *Hermetica: The Greek Corpus Hermeticum and the Latin Asclepius in a new English translation, with notes and introduction*. Cambridge: Cambridge University Press.

(Discourse) VIII, 5: "Hold your tongue, my child, and understand what god is, what the cosmos is, what an immortal living thing is, what a dissoluble living thing is, and understand that the cosmos was made by god and is in god but that mankind was made by the cosmos and is in the cosmos; understand that god begins, contains, and composes all things." ‡

GREEK ALPHABET | CIRCLE | 27 LETTERS

OBSERVATIONS

Φ Ω Σ (phôs), Φ Ω Ω Σ (phóōs), Φ Α Ο Σ (pháos)
Φ Α Ξ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 16

† Copenhagen, B.P., 1992. *Hermetica: The Greek Corpus Hermeticum and the Latin Asclepius in a new English translation, with notes and introduction*. Cambridge: Cambridge University Press.

(Discourse) II', 12: "What, then, is god?" "God is what does not subsist as any of these since he is the cause of their being, for all of them and for each and every one of them that exists. "

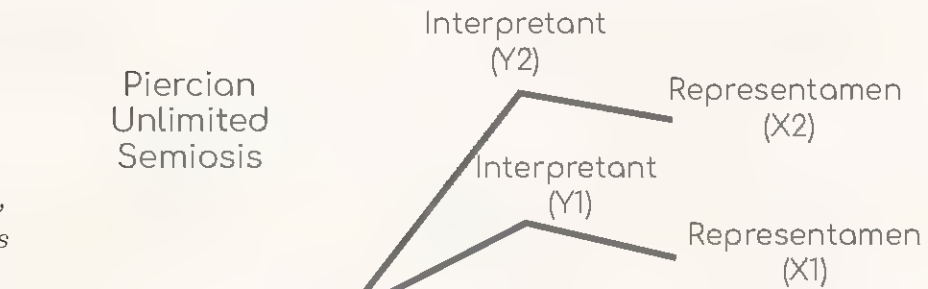
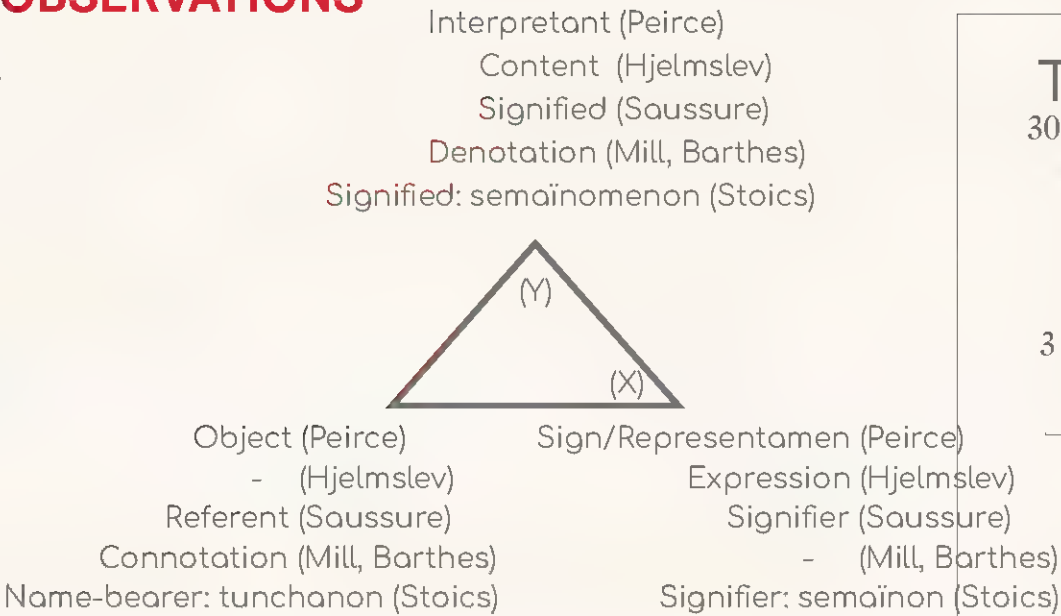
As a comment, it should be noted that in design within a circle, every material element that has existed, exists, and could exist is described. Within it, material forms are described and analyzed two-dimensionally. ‡

† Peirce, C.S. (author), Buchler, J. (ed.) (1955). *Philosophical writings of Peirce*. New York: Dover Publications. (pp.114-115)

Danesi, Marcel (2004). *Messages, Signs, and Meanings. A Basic Textbook in Semiotics and Communication*. 3rd edition. Volume 1 in the series Studies in Linguistic and Cultural Anthropology. Toronto: Canadian Scholars' Press Inc.

Peircean Semiotics: «Charles Peirce called the actual physical form of a representation, X, the representamen (literally, "that which does the representing"); he termed the Y to which it calls attention, the object of the representation; and the meaning or meanings that can potentially be extracted from the representation (X y), the interpretant. The whole process of deciding the meaning of the representamen is, of course, called interpretation

Peirce called the sign a representamen and the concept, things, idea, etc., to which it refers the object. He termed the meaning (impression, cogitation, sense, etc.) that we get from a sign the interpretant. These three dimensions are always present in signification. Thus, the Peircean viewed the sign as a triadic, rather than binary, structure:

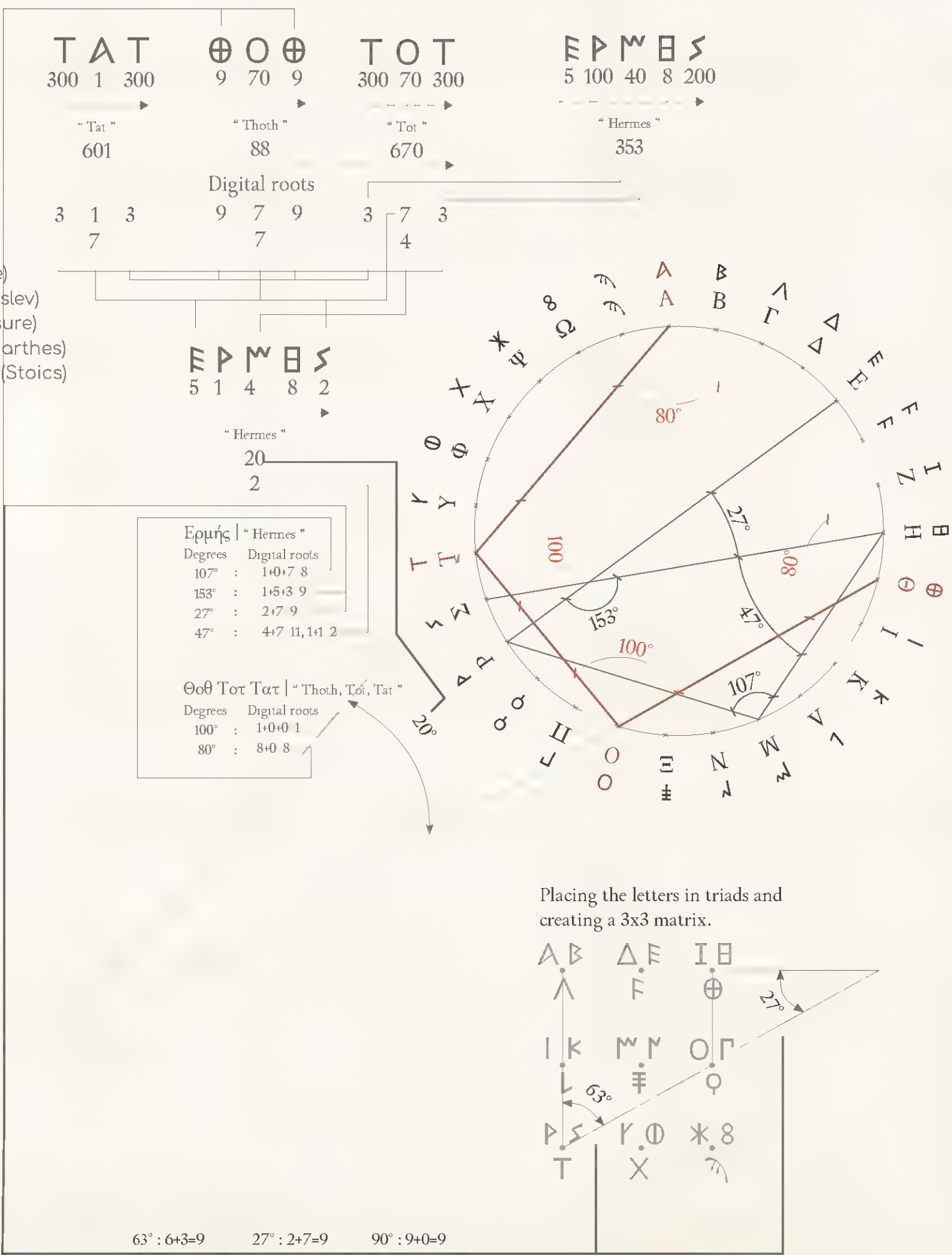


For the Peircean Semiotics, the symbol is defined when "the sign is designed to encode a referent by convention or agreement." (Danesi)

It is applicable to whatever may be found to realize the idea connected with the word ; it does not, in itself, identify those things. It does not show us a bird, nor enact before our eyes a giving or a marriage, but supposes that we are able to imagine those things, and have associated the word with them.

Every physical force reacts between a pair of particles, either of which may serve as an index of the other. On the other hand, we shall find that every intellectual operation involves a triad of symbols. A symbol, as we have seen, cannot indicate any particular thing ; it denotes a kind of thing. Not only that, but it is itself a kind and not a single thing.

Symbols grow. They come into being by development out of other signs, particularly from icons, or from mixed signs partaking of the nature of icons and symbols. We think only in signs. These mental signs are of mixed nature ; the symbol-parts of thc.1 are called concepts. If a man makes a new symbol, it is by thoughts involving concepts. So it is only out of symbols that a new symbol can grow. Omne symbolum de symbolo. A symbol, once in being, spreads among the peoples." ‡



GREEK ALPHABET | CIRCLE | 27 LETTERS

OBSERVATIONS

Φ Ω Σ (phôs), Φ Ω Σ (phóōs), Φ Α Ο Σ (pháōs)
Φ Α Ψ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 17

† In the circle of 27 letters, the apex angle of the isosceles triangle of the Greek words THOTH TOT TAT ΘΘΘ-TOT TAT equals 20°. Simultaneously, the numerical value of the letters in HERMES equals 20. Thus, the words describing Hermes Trismegistus show an implicit numerical equivalence of the number 20. If not a coincidence, it appears as a 'silent' manipulated result of name creation based on geometric and numerical semiotic correlations. ‡

† Hermes Trismegistus & The Three Initiates 2020 *The Emerald Tablet of Hermes & The Kybalion*. Augusta, GA: Quicktime Press.

Regarding the possibility of design by unknown name makers/mathematicians? over the centuries, it is observed that the geometric shape and numerical values are connected to the philosophical object of Hermes Trismegistus as symbolic meanings created in the interpreter's mind. The geometric image and the numbers function as signs, and beyond their immediate presence, they refer to a deeper, symbolic meaning associated with Hermes Trismegistus, suggesting a mystical or esoteric significance. The Emerald Tablet of Hermes Trismegistus: "2 As below, so above, and as above, so below. With this knowledge alone you may work miracles [...]. 13 It is for this reason that I am called Hermes Trismegistus, for I possess the three essentials of the philosophy of the universe [From Fulcanelli. Translated from the French by Sieveking]." Geometrically, however, the number three is depicted with a triangle.

This 'silent' design grammar of name creation, revealed through semiotic correlations, not only hints at a deeper, hidden truth but also suggests a deliberate creation of meaning through abstract concepts and set significances, a key aspect of our analysis.

The numerical and geometric symbolism we've uncovered here is not just a singular instance but could be considered part of a broader design tradition and a quest for deeper, hidden truths, a concept that resonates beyond the specific case of Hermes Trismegistus, it derived from the depths of the millennia. ‡

† Framework of analysis of Representamen, Object, Interpretant. Peirce's Semiotic Triangle Diagram.

Representamen: Numerical Sum 20 of the letters HERMES = ΕΡΜΗΣ

The Gowna of the Representamen: The mystical Framework of Hieroglyphics and the history of Thoth as the protector of letters. Egypt. The Framework of word-number connections. Greece, shared knowledge, the rendering creation of complex geometric designs in their temple architecture.

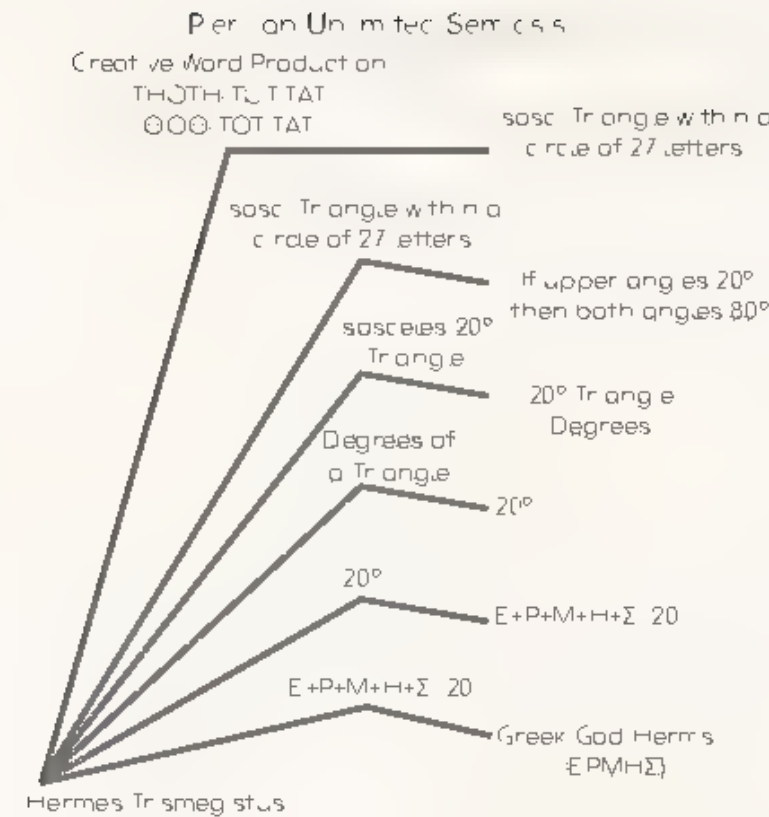
Object: Hermes Trismegistus.

Interpretant: Mystical significance of the number and reference to the Framework of geometric expression. ‡

† Λαγόπουλος Α. Φ and Λαγόπουλου Κ. Β. Lagopoulos A. F and Lagopoulos C. B. 2016. Θεωρία της σημειωτικής. Η παραδοχή του Γερμανιστή. *Theory of Semiotics. The Tradition of Germanism*. Βαμβάκιδοι Ι., Κουρδής Ευ., Χριστοδούλου Α. and Κολιτσόπουλου Μ. eds. Αθήνα: Παπασκη. p.68-69.

Peirce describes the process of unlimited semiosis as follows: Each interpretant leads to a new representation with reference to the same initial object because in order to be indicated, it must be named with the help of another sign, which in turn has another interpretant. ‡

† Below is presented the layered approach to interpretation that reflects Peirce's semiotic theory, where meaning is dynamically constructed through a triadic relationship between sign, object, and interpretant. ‡



The successive semiotic levels—the cascade of Semiosis of Peirce form a continuous Interpretative Layer each time, which is related to the deeper understanding of the significance of these correlations in relation to earlier philosophers. The condition of the transmutative property of things is found in the pre-Socratics, which is why they were presented at the beginning, and it is also found in the texts of Hermetic thought.

The isosceles triangle functions as a powerful geometric symbol depicting the union of dialectical opposites into a unified whole. This can be seen as a reflection of Hermes Trismegistus himself, who bridges the divine with the mortal, the above with the below. Equilateral, isosceles, and right triangles are used in the design of pyramids—carriers of knowledge and wisdom—as well as in Greek temples.

The repetition of the number "20" creates a symbolic solid bond between the geometric arrangement and the name HERMES.

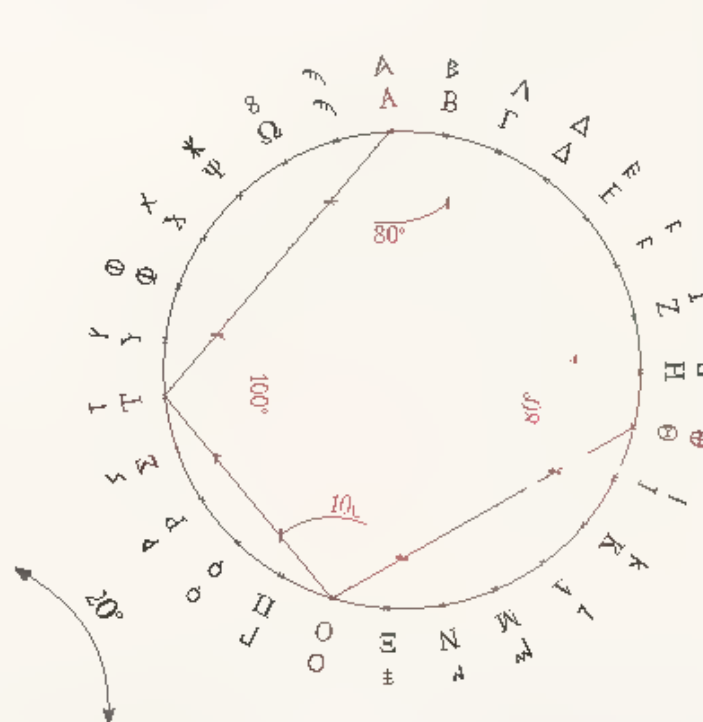
The journey of interpretation from sign to meaning illustrates how abstract symbols, numbers, and shapes are enriched with deep philosophical and spiritual significance through the cultural and historical context.

Circle: Represents the circle of creation that "belongs to God" or "is defines the God," since He is the Creator of All. The circle can create every material form, like God.

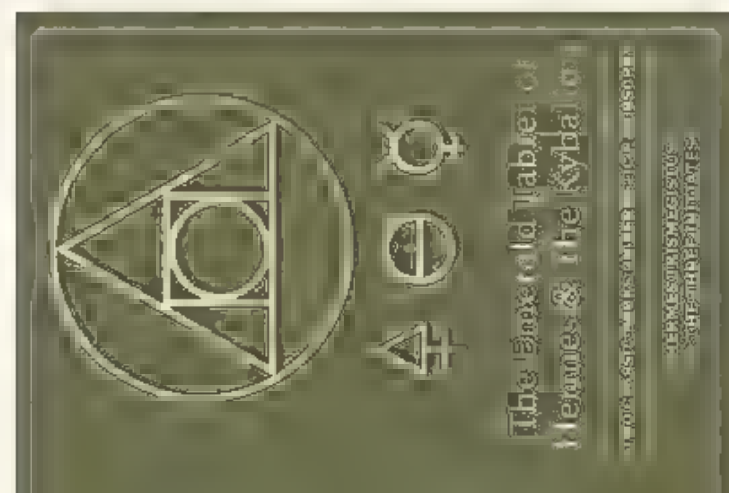
Within the circle: An isosceles triangle of 20° that implicitly carries the sum of the digital roots of the letters of the Greek word HERMES = ΕΡΜΗΣ).

Isosceles triangle: Symbolizing the wisdom and knowledge encoded in the signs.

The diagram illustrates how the geometric formation (isosceles triangle with an apex angle of 20°) and the numerical analysis (the sum of the letters in HERMES [ΕΡΜΗΣ] equals 20) intertwine towards the same symbolic significance, reinforcing the connection between sign and object through multiple semiotic paths. ‡



† "Silent" Onomatopoeia: "Silent" Onomatopoeia involves creating meaning through a geometric quest, connected with the semiotic process of depicting abstract concepts with symbols and associating numbers with geometric shapes.



GREEK ALPHABET | CIRCLE | 27 LETTERS | OBSERVATIONS

Φ Ω Σ (phôs), ΦΟΩΣ (phóōs), Φ Α Ο Σ (pháos)
Φ Α Ψ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 18

Johansen, J.D.,
(1998). Hjelmslev and
Glossematics. In 2.
Teilband. Published by
De Gruyter Mouton. DOI:
10.1515/
9783110156614.2.12.2272

† Λαγόπουλος Α.-Φ. and Λαγοπούλου Κ.-Β. (Lagopoulos A.-F. and Lagoroulou C.-B.) (2016). *Θεωρία της Σημειωτικής : Η παράδοση του Ferninard de Saussure (Theory of Semiotics: The Tradition of Ferdinand de Saussure)*. Βαμβακίδου Ι., Κουρδής Ευ., Χριστοδούλου Α. and Κολιτσοπούλου Μ. (eds). Αθήνα: Πατάκη. p.75-81

The reasoning process of this symbolic thought can also be depicted with the denotative sign & connotative sign diagram following the approach of Louis Hjelmslev, regardless of whether his theory aligns with Peirce. This is chosen to make the process of diagrammatically representing the mechanism of connotative sign levels more understandable to the reader.

Connotation: The two parts (signifier Sa and signified Se) as a whole of the denotative sign S1 are referred to as a second and indirect meaning (the connotation), elevated to a second level, producing the connotative signifier (Sa2).

Semiotic process of symbolic production of the onomatopoeia THOTH-TOT-TAT (= ΘΟΘ-TOT-TAT) through the philosophical framework of Hermes Trismegistus and the predecessors in 6 levels of connotative signs. The sequence of levels presented corresponds to the steps of the semiotic process for producing the names THOTH-TOT-TAT through the circle of 27 Greek letters. ‡

Stereoscopic view
of the universe



Denotative Signifier	Denotative Sign	Connotative Signifier	Connotative Sign

† The names of the god Thoth vary, but it was chosen to investigate Tot-Tat-Thoth (=Tot-Tat-Θοθ). Below are those found in the literature:

[Thoth,Tat]: Budge, E.A.Wallis (1895/1999). *The Book of the Dead*. Gramercy. ISBN 0-517-12283-9. p.282.

[Tot,Tat]: Eckart, Karl-Gottfried (trans.) (1999). *Das Corpus Hermeticum einschließlich der Fragmente des Stobaeus*. Siegert, F. (ed.). Münster: LIT Verlag. (Münsteraner Judaistische Studien; 3). ISBN 3-8258-4199-5. p.9

[ancient text: Τατ. Prologue: Tot, Θοθ, Τατ]: Ερμής Τρισμέγιστος (1990). *Ερμητικά Κείμενα (Hermetica)*. Translated and Edited by: Περικλής Ροδάκης (Λόγοι Ι-XII). Αθήνα: Παρασκήνιο

[Θευθ as an artisan and the father of letters]: Plato, Phaedrus. 243e-247c [online] Available at: https://www.greek-language.gr/greekLang/ancient_greek/tools/corpora/anthology/content.html?m=1&t=555

[Greeks:Hermes, Romans:Mercury, Egyptian:Tot,Toot,Tat]: Greswell, Edward (1852). *Fasti Temporis Catholici and Origines Kalendariae*. In four volumes. vol. 3. Oxford: At The University Press. p.30

[Θωθ,Τατ]: Σχινάς, Κ.Δ., (1845). *Ιστορία των Αρχαίων Εθνών, Συνταχθείσα εν Τρισι Βιβλίοις. Βιβλίον Πρώτον: Τα Ασιανά και Λιβυκά (History of Ancient Nations, Compiled in Three Books. First Book: The Asian and Libyan.)*. Vol. 1 Αθήνα: Τυπογραφείο Μνημοσύνης, Χ. Νικολαΐδου Φιλαδελφείας. (Εθνική Βιβλιοθήκη Αυστρίας) p.141

[pronounced and written also as Tot, Toot, Tet, Teti, Tat, Tati: and any of these might be more accurate than Thoth, which was his name only in the style and dialect of the Alexandrian Greeks]: Greswell, Edward (1862). *Origines Kalendariae Hellenicae: Or, The History of the Primitive Calendar Among the Greeks, Before and After the Legislation of*

Solon, vol. 4. Oxford: At The University Press. (Εθνική βιβλιοθήκη Αυστρίας) p.531

[Θοθ]: Pérez Sánchez, Miquel (2015) *La gran Pirámide: Clave secreta del pasado*. Punto Rojo Libros S.L. Available at: <https://books.google.com/books?hl=el&id=2WgTCwAAQBAJ&q=θοθ#v=snippet&q=θοθ&f=false> p.213-215,249-251

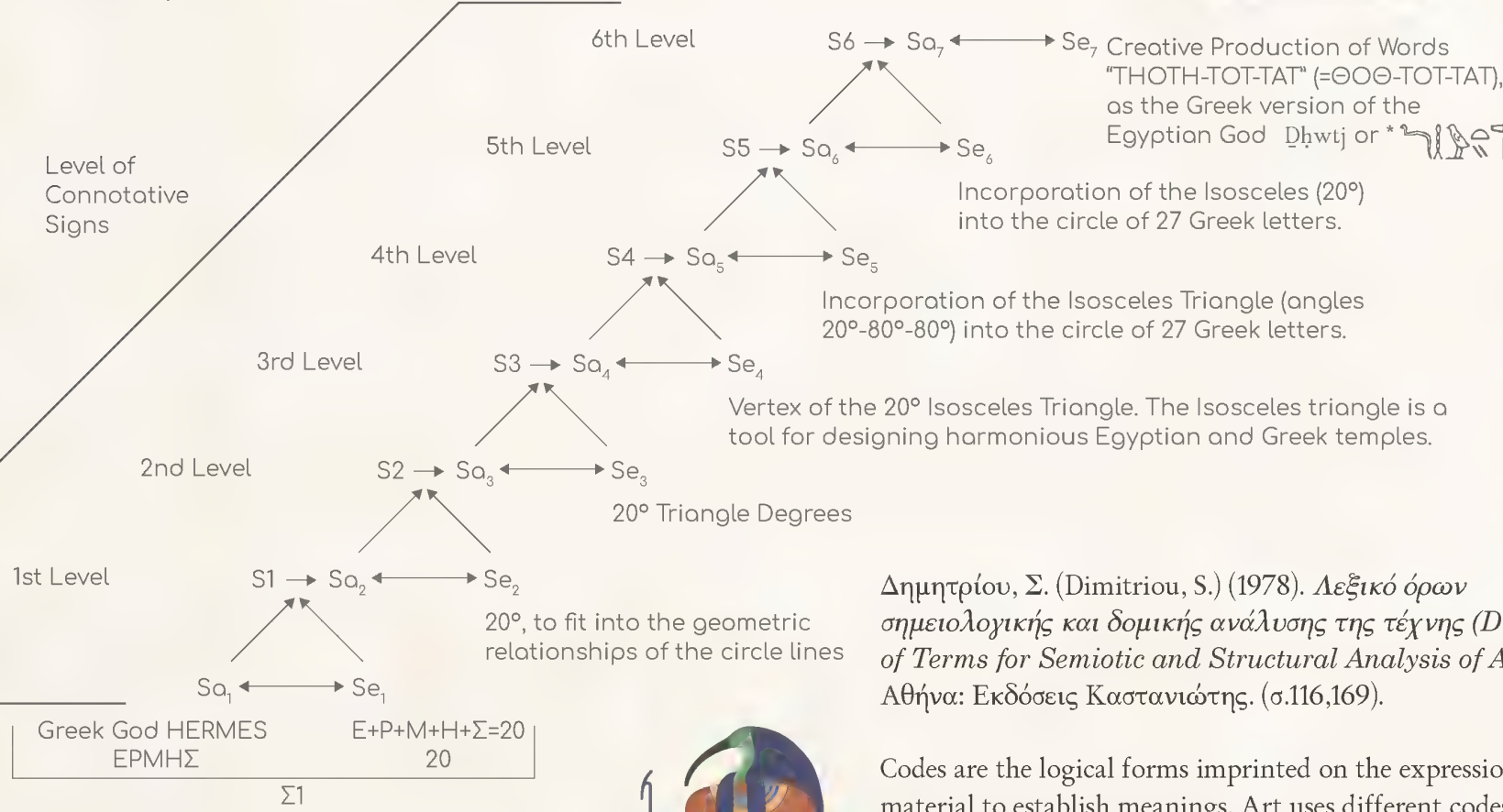
[Θωθ]: Claudius Ptolemaeus (Alexandrinus), Theon (Alexandrinus), Simon Grynaeus, Joachim Camerarius (Sr.), 1538. I. *Ptolemaiou Megalēs syntaxeōs bibl. iğ. Basel: apud Ioannem VValderum*. Original from the National Library of the Netherlands. Digitized on 21 February 2019. p.136. ‡

† Erasmus (von Rotterdam), Desiderius (1528). *De Recta Latini Graecique Sermonis Pronuntiatione D. Erasmi Dialogus. Eiusdem Dialogus Cui Titulus Ciceronianus, Sive De Optimo Genere Dicendi. Cum Aliis Nonnullis, Quorum Nihil Non Est Novum*. Published by apud Sebastianum Gryphium. [online] Available at: <https://play.google.com/books/reader?id=IYtMAAAAcAAJ&pg=GBS.PA64&hl=el>

Regarding the pronunciation of omicron and omega. (Erasmus, 1528, p.65)

“Sequitur o, similiter ex arteria prodiens quemadmodum a, lingua recta quidem sed introrsum modice reducta [...] Item ω mega nihil differt ab o nisi quod a longum differt ab a breui. Nam pleniore sono profertur, de quo suo dicetur - loco”

In translation: "Next comes 'o', similarly emerging from the artery as 'a', with the tongue straight but slightly retracted inward. [...] Also, 'ω' differs from 'o' only in that the long 'a' differs from the short 'a'. It is therefore pronounced with a fuller / richer sound, about which the necessary details will be said later in another part of the analysis." ‡

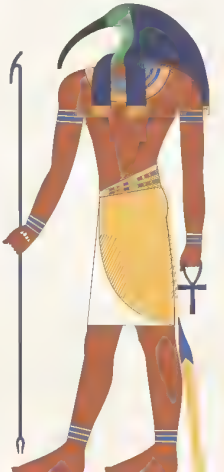


Sa: Signifier. Se: Signified. S1: Denotative Sign.
Leads to: → . Interdependence of Signs: ↔

Δημητρίου, Σ. (Dimitriou, S.) (1978). *Λεξικό όρων σημειολογικής και δομικής ανάλυσης της τέχνης (Dictionary of Terms for Semiotic and Structural Analysis of Art)*. Αθήνα: Εκδόσεις Καστανιώτης. (σ.116,169).

Codes are the logical forms imprinted on the expression material to establish meanings. Art uses different codes from communication systems. Each art form is a semiotic system that uses multiple codes. Notably, the categories of signs characteristic of each art form constitute unsystematic (depictions, aesthetic signs, synthetic images, natural language, etc.) and variable codes, highlighting the unique and creative aspects of art. The symbol is synecdochic with what it represents, being in some analogy to it.

*Collier, M. and Manley, B., 1998. How to Read Egyptian Hieroglyphs: Revised Edition. Berkeley: University of California Press, p.161.



GREEK ALPHABET | CIRCLE | 27 LETTERS † |

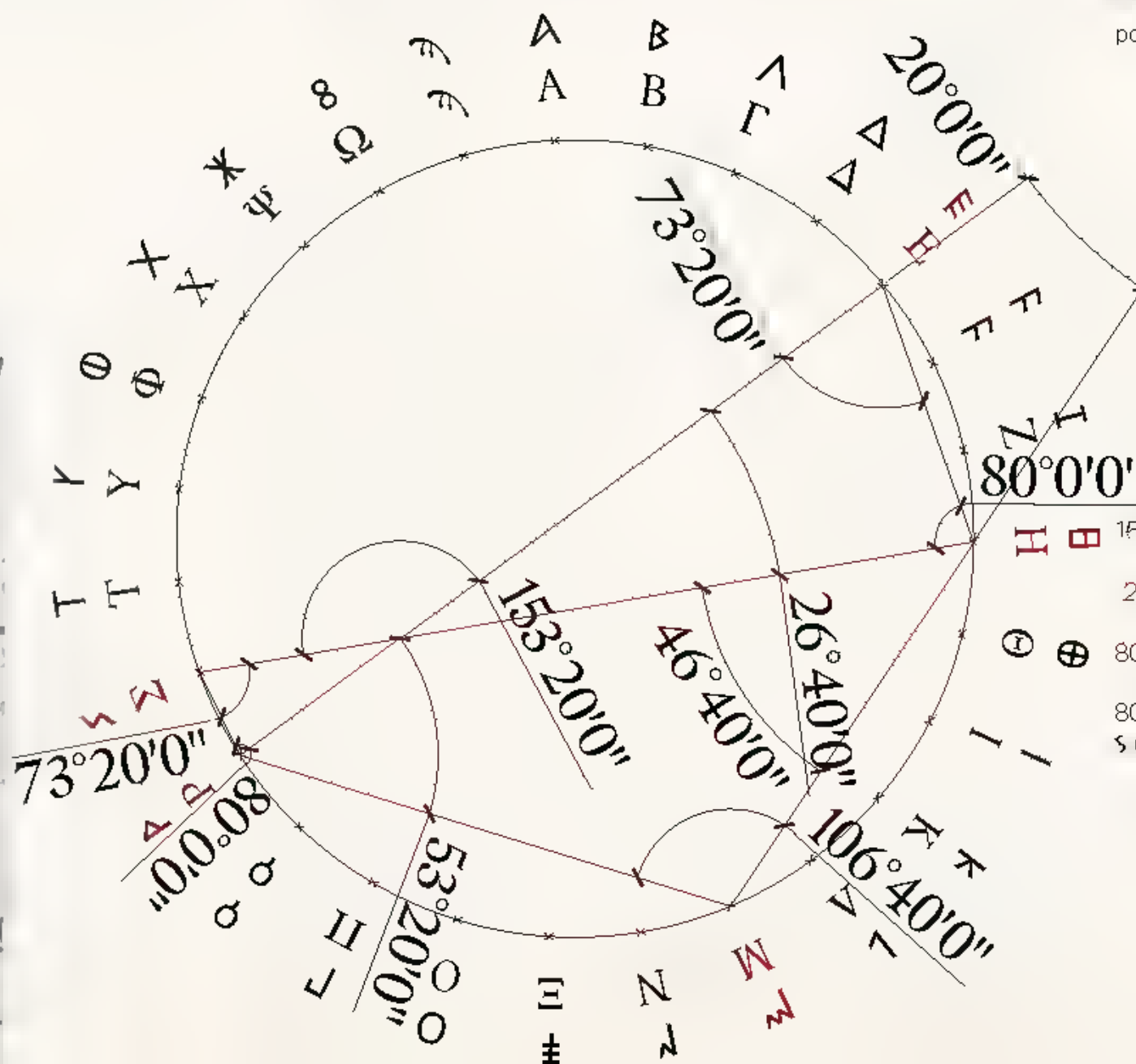
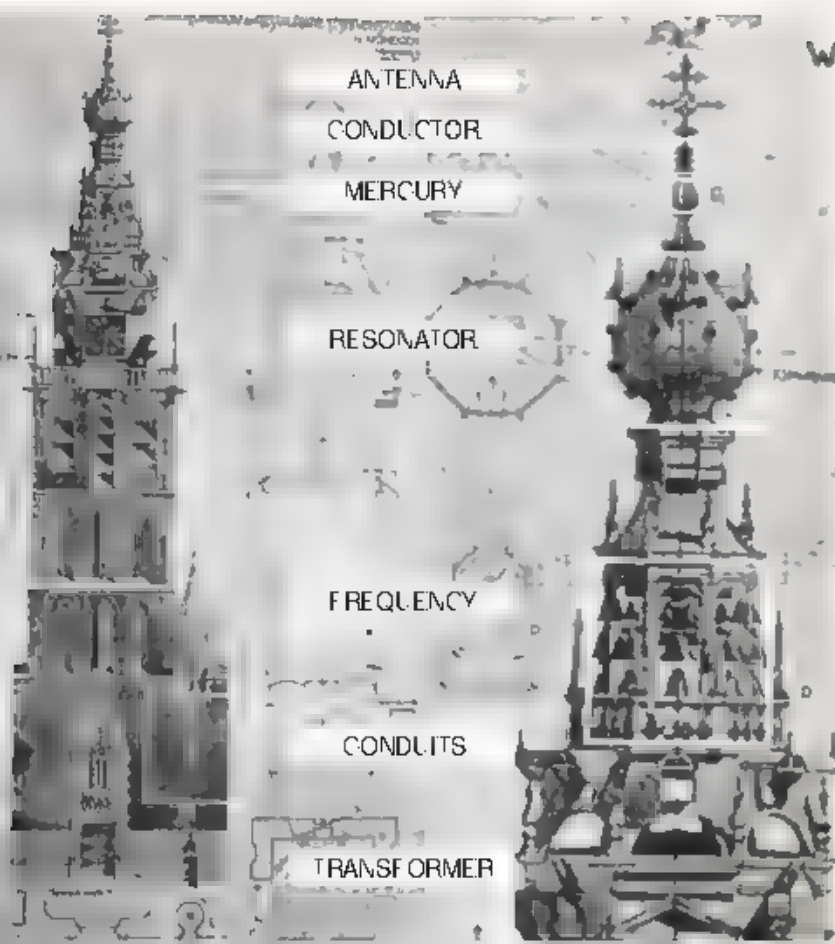
© Petrakis Petros 2021-22
Mercury Greek Alphabet
[Drawing Observation]
Athens, Greece
observation

† Stillman, J. M., 2003. *Story of Alchemy and Early Chemistry*. Kessinger Publishing, pp. 7-9; and Maurice Grosland 2004. *Historical Studies in the Language of Chemistry*.

The connection between the god Hermes, known as Mercury in English, and the chemical element Mercury originates from the alchemical tradition of antiquity and the symbolism associated with the planet Mercury. In alchemy, the astrological symbol of the planet Mercury became one of the alchemical symbols for the metal mercury, and the name Mercury was established as an alternative name for the metal Mercury, the only metal liquid at room temperature, possessed characteristics such as fluidity and a mutable nature, which linked it to the god Hermes, known for his agility and swiftness.

Coincidence of discovering information on the chemical element Mercury. Its English name derives from the Roman god Mercurius, known to the Greeks as Hermes. Hermes, the god, was renowned for his speed and mobility, traits metaphorically associated with the liquid metal that can move swiftly and fluidly. The connection between celestial bodies, gods, and materials was common in the worldview of alchemy and early science. Mercury was a propellant in early ion engines in electric space propulsion systems. The advantages included the high molecular mass of Mercury, low ionization energy, low double ionization energy, high liquid density, and its ability to be stored in liquid form at room temperature. The disadvantages included concerns about environmental impacts from ground tests and issues related to the final cooling and condensation of some fuel in the spacecraft during long-term operations. ‡

Erection of temples during the flourishing period of alchemy (12th-18th century AD) alongside the quest for the properties of chemical elements, such as Mercury, Copper, and Gold.



Ancient Greek

ΕΡΜΗΣ

Hermes

English

1. (Greek mythology) Hermes (messenger of the gods)
2. (astronomy) Mercury (planet)
3. (chemistry, element) Mercury, Hg

History

before 1500 BCE, discovered by the Ancient Egyptians.
1964, NASA, a propellant for early ion engines in electric space propulsion systems, and launched the SERT-1 spacecraft in 1964, which was the first to use electric propulsion powered by a mercury fuel cell on theuster developed at NASA Glenn Research Center.

Physical properties

Phase at STP	Liquid
Melting point	234.3210 K (−38.8290 °C, −37.8922 °F)
Boiling point	629.88 K (356.73 °C, 674.11 °F)
Density, near rt	13.534 g/cm³
Triple point	234.3156 K, 1.65×10 ^{−7} kPa
Critical point	1750 K, 172.00 MPa
Heat of fusion	2.29 kJ/mol
Heat of vaporization	59.11 kJ/mol
Molar heat capacity	27.983 J/(mol·K)

Wikipedia (2019). Mercury, element 1 [online]. Available at: https://en.wikipedia.org/wiki/Mercury_element

$$\begin{aligned}
 & \text{H} \square 153.334^\circ + 53.334^\circ + 26.667^\circ = 233.335^\circ \\
 & 26.334^\circ \cdot 2 = 52.668^\circ \\
 & \oplus \oplus 80^\circ + 80^\circ + 26.334^\circ \cdot 2 = 173.167^\circ \\
 & 80^\circ + 80^\circ + 20^\circ + 153.334^\circ + 46.667^\circ \cdot 2 = 356.667^\circ \\
 & \text{Simplified form: } 80^\circ + 80^\circ + 20^\circ + 153.4^\circ + 46.7^\circ \cdot 2 = 356.75^\circ
 \end{aligned}$$

A beautiful coincidence:

Theory of Semiotics
denotation connotation
x y

$$\begin{aligned}
 233.335^\circ & \sim 234.3210 \text{ K} \\
 356.75^\circ & \sim 356.73^\circ \text{C} \\
 13.167^\circ & \sim 13.534 \text{ g/cm}^3 \\
 173.167^\circ & \sim 172.00 \text{ MPa} \\
 26.667^\circ & \sim 27.983 \text{ J/mol K}
 \end{aligned}$$

OBSERVATIONS ON LIGHT

Lidder & Scott, 1940) A Greek-English Lexicon Oxford: Clarendon Press

Epic, Poetic (Homeric and Hesiodic) types

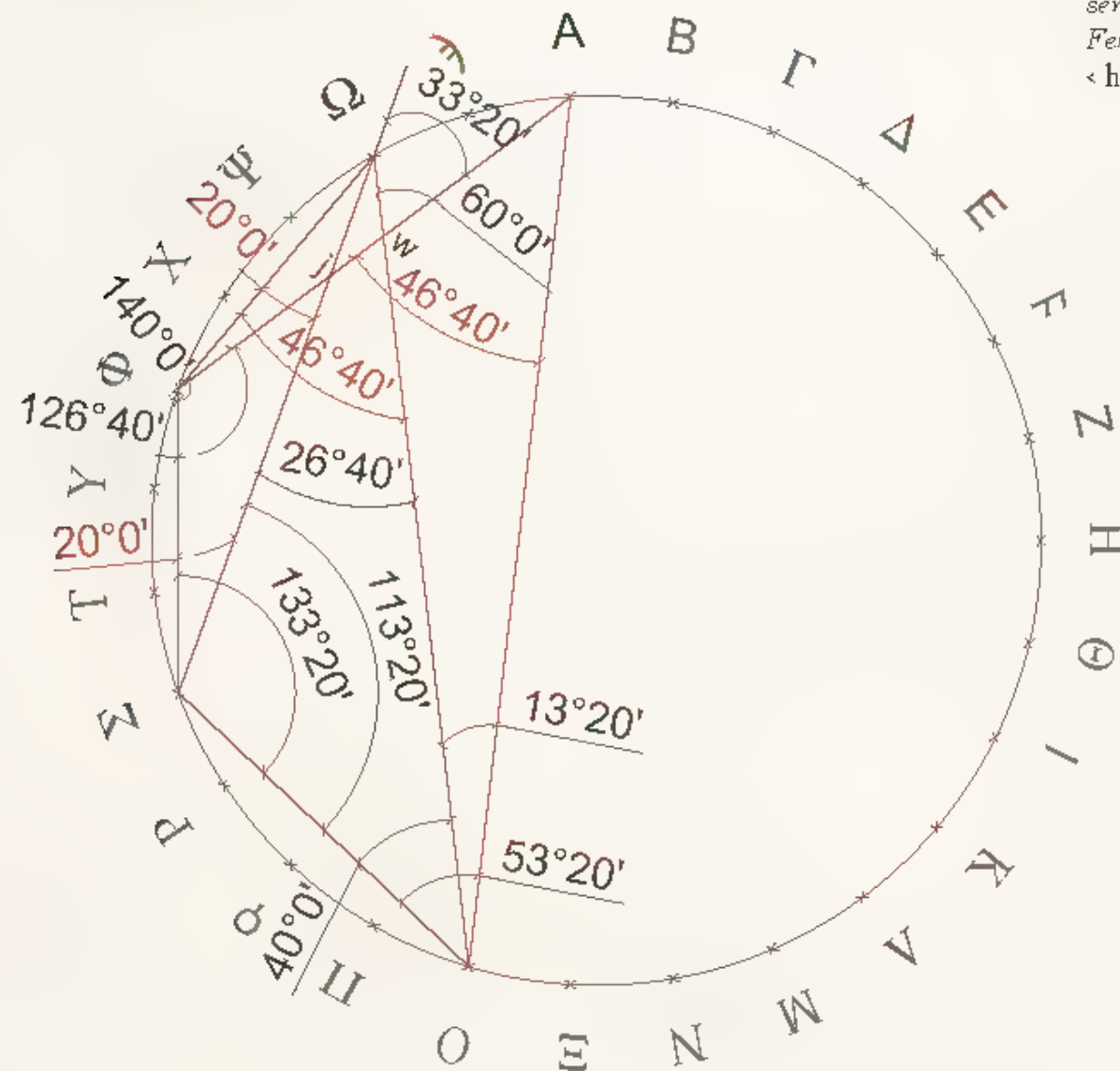
[ΦΑΟΣ, ΦΩΟΣ] & [ΦΑΕΟΣ]

[(pháos), (phôôs)] & [(pháeos)]

Attic & Aeolic types

[ΦΩΣ] & [ΦΑΨΟΣ]

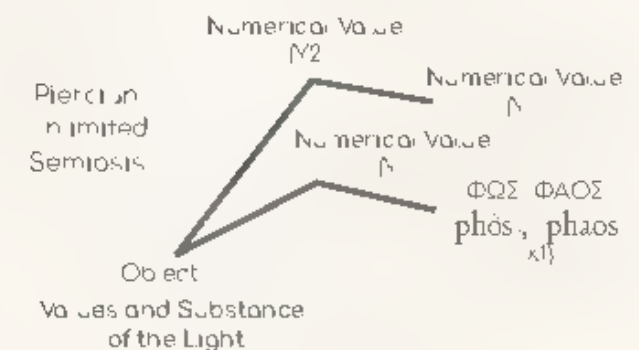
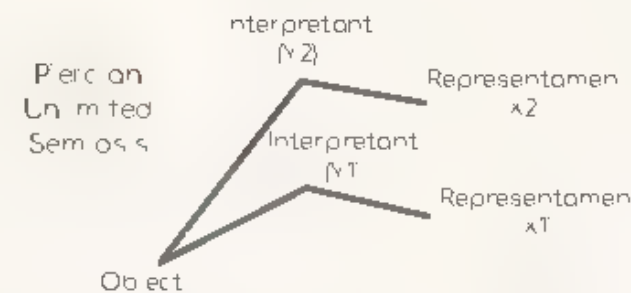
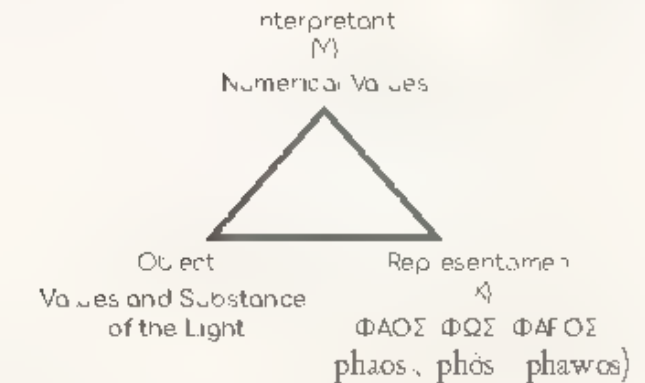
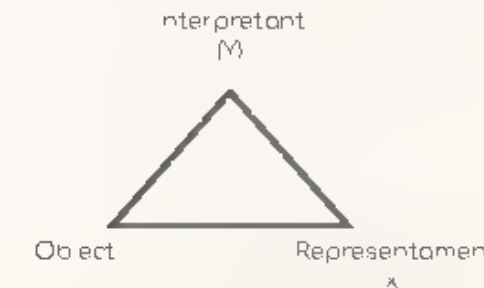
phôs & phâôs



† In the work "Metaphysics," Aristotle DOI 10.4159/DLCL/aristotle-metaphysics.1933 mentions

A, 5, 985b[25] 986a[9] "Pythagoreans applied themselves to mathematics and were the first to develop this science and through studying it they came to believe that its principles are the principles of everything [] and since they saw further that the properties and ratios of the musical scales are based on numbers and since it seemed clear that all other things have their nature modeled upon numbers and that numbers are the ultimate things in the universe they assumed the elements of numbers to be the elements of everything and the universe to be a proportion of number" < <https://www.loebclassics.com/view/aristotle-metaphysics.1933/pb.LCL271.33.xml> >

A, 5, 986a[17-27] "Well, it is obvious that these thinkers too considered number to be a first principle both as the material of things and as constituting their properties and states. The elements of number according to them are the Even and the Odd. Of these the former is limited and the latter unlimited. Unity consists of both, since it is both odd and even. If number is derived from Unity, and numbers as we have said compose the universe, others of this same school hold that there are 10 principles, which they enunciate in a series of corresponding pairs: Limit and the Unlimited, Odd and Even, Unity and Plurality, Right and Left, Male and Female, Rest and Motion, Straight and Crooked, Light and Darkness, Good and Evil, Square and Oblong" < <https://www.loebclassics.com/view/aristotle-metaphysics.1933/pb.LCL271.35.xml> > ‡



Semiotic Theory of Charles Sanders Peirce

Semiotic Relationship x y

for x [a Denotative Signifier, b Representamen] &

y [a₁ Connotative Signified, b₁ Interpretant]

It is assumed that the Connotative Sign y₁ follows the Denotative Sign x₁ at Levels of Unlimited Semiosis see relevant example in the diagram on page 18. For brevity, they will be noted from here on in the following:

Theory of Semiotics

denotation = connotation

x = y

***Observations are made within literary contexts and should be regarded as such, any numerical alignment is perceived as a beautiful coincidence that highlights the beauty of the existence of the human species. Given contemporary scientific data, our civilization has accurately measured the speed of light and other related quantities. The author bears no responsibility for how the reader interprets the publication.

GREEK ALPHABET | CIRCLE | 27 LETTERS

OBSERVATIONS

Φ Ω Σ (phôs), Φ Ω Σ (phôds), Φ Α Ο Σ (pháos)
Φ Α Ξ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 21

‡ Initially, the numerical values of the words [ΦΑΟΣ], [ΦΩΟΣ], [ΦΑΕΟΣ], [ΦΩΣ] & [ΦΑΞΟΣ] will be found. ‡

‡ Based on Number Theory, the digital roots of the words are obtained, and geometric shapes are designed. The digital root corresponds to the points of the circle that define these shapes. In the ancient Greek language, the numbers were also letters that constituted a syntagm. ‡

‡ Mitchell, William J. 1990 *The Logic of Architecture*. Cambridge, Massachusetts: MIT Press. first published January 1st 1990 [online] Available at <https://archive.org/details/logicofarchitect00mitc>

Stiny, G. and Gips, J. 1972 *Shape Grammars and the Generative Specification of Painting and Sculpture*. *Information Processing 71 Proceedings of the IFIP Congress 1971*, 2, 71, 1460-1465 [online] Available at https://www.researchgate.net/publication/221329330_27Shape_Grammars_and_the_Generative_Specification_of_Painting_and_Sculpture%27

Stiny, G. The algebras of design. *Research in Engineering Design* 2, 171-181 1991 [online] Available at <https://doi.org/10.1007/BF01578998>

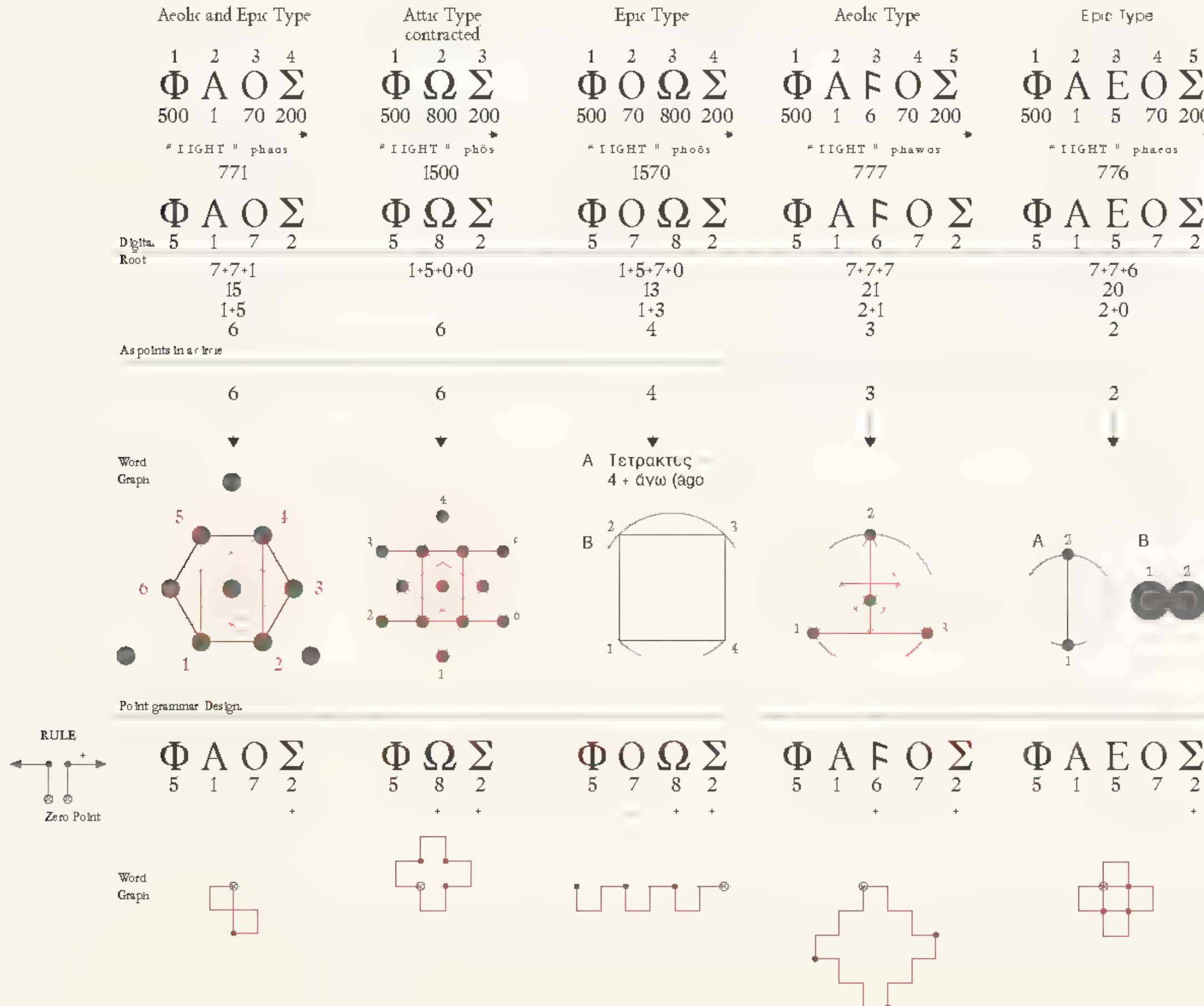
The second concerns the generation of shape from a given point through alternating odd and even numbers related to the point's movement in equal perpendicular distances: a set grammatical design rule.

From the convention of ancient civilizations to utilize letters, glyphs, in mathematics, they can behave as numbers—based on the governing logic of alphanumeric systems.

Therefore, if a grammatical rule design is composed, there can be at least one geometric design.

The first rule was the reduction of letters to a circle and the examination of their geometric behavior. A second rule is the definition of the movement of a continuous line (single stroke) with vertical motion, which writes each odd number letter on the left and each even number on the right.

Note: The line length always has the value of one unit of length. ‡



GREEK ALPHABET | CIRCLE | 27 LETTERS

OBSERVATIONS

Φ Ω Σ (phôs), Φ Ω Σ (phôds), Φ Α Ο Σ (pháos)
Φ Α Ε Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 22

† Number Theory Pisano Period.

Θα αναζητηθούν τα διαδοχικά αθροίσματα θέσεων στην *Pisano Period*, ώστε μέσα σε αυτά να αναζητηθούν οι αριθμητικές ισοψηφίες των λέξεων.

Pisano Period When the Fibonacci numbers are divided by a natural number m , the remainders of the division with modulus m form a periodic sequence of digits.

The first period of this sequence, i.e., the repetition length before the sequence restarts since it repeats infinitely, is called the *Pisano Period* for the number m . For example, the *Pisano Period* for $m=2$ is 3, because



SUM OF SCHEMES OF LIGHT

[SUM OF SCHEMES OF LIGHT] & [π(97)=196 SCHEME]

the sequence of the remainder of the Fibonacci numbers when divided by 2, i.e., 0, 1, 1, 0, 1, 1, ... repeats every 3 numbers. The *Pisano Period* is used in mathematical analysis and has applications in *Cryptography* and *Number Theory*.

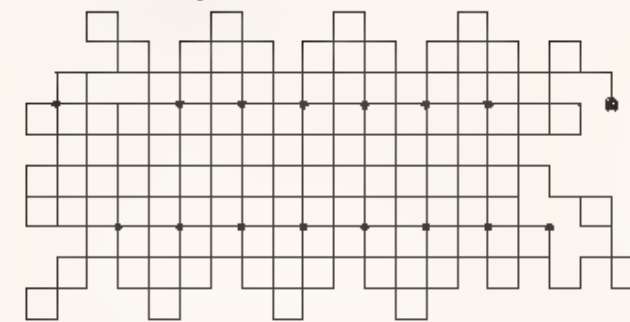
† The number 97 mod 97 is chosen to find the sums of the letters of the words for light within the successive sums at the previous positions of the periodic digits of mod 97 for the Fibonacci numbers. The number 97 is chosen for the following reasons:

- The number 97 is chosen for the following reasons:
97 has a digital root of 7, and the digit 7 appears several times in the

$F_n \text{ mod } 97$
 $\pi(97) = 196$
 $\text{in_modulo } 97$
[0 1 1 2 3 5 8 13 21 34 55 89 47 39 86 28 17 45 62 10 72 82 57 42 2 44 46 90 39 32 71 6 77 83 63 49 15 64 79 46 28 74 5 79 84 66 53 22 75 0 75 75 53 31 84 18 5 23 28 51 79 33 15 48 63 14 77 91 71 66 39 7 46 53 2 55 57 15 72 87 62 52 17 69 86 58 47 8 56 63 21 84 8 92 3 95 1 96 0 96 96 95 94 92 89 84 76 63 42 8 50 58 11 69 80 52 36 87 25 15 40 55 95 53 51 7 58 65 26 91 20 14 34 48 82 33 18 51 69 23 92 18 13 31 44 75 22 0 22 22 44 66 13 79 92 74 69 46 18 64 82 49 34 83 20 6 26 32 58 90 51 44 95 42 40 82 25 10 36 45 80 28 11 39 50 89 42 34 76 13 89 5 94 2 96 1]

RULE
Zero Point

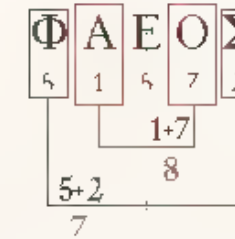
Pisano Period Graph



sums, specifically in «ΦΑΕΟΣ 777». Moreover, as documented below, the number 6 is found in the positions of the produced tables and the words for light themselves, forming the framework of the Table.

- 97 is a multiple of 776. The number 776 is the alphanumeric equivalence of the word ΦΑΕΟΣ, as $776 = 97 \times 8$. Additionally, the number 8 is present within the words, as 8 is the digital root of omega, 'ΩΜΕΤΑ' Ω.

	Φ Α Ε Ο Σ	Φ Ω Ο Σ	Φ Ω Σ
DIGITAL	5 1 5 7 2	5 8 7 2	5 8 2
ROOT	"LIGHT" phaeos "	"LIGHT" phoos "	"LIGHT" phos "
	20	20	20
	2	2	2



E & Φ are located at the center of the 3x9 Table in the Greek Alphabet of 27 Letters. In Euclidean Geometry, every center creates an axis of symmetry. In the case of the phonetic chain ΦΑΕΟΣ, if E is replaced semiotically with an axis of symmetry, then the grammatical terms can be added together as diametrically opposite points of a straight line segment. As a result, the numbers 8 and 7 emerge, producing an internal circular numerical relationship.

Sequential Summations of Periodic Digits Position

0	720	1727	2681	3743	5022	6078	7005	7946	9012
1	777	1732	2729	3829	5106	6136	7005	8004	9025
2	819	1811	2792	3887	5182	6201	7027	8094	9114
4	821	1895	2806	3934	5245	6227	7049	8145	9119
7	865	1961	2883	3942	5287	6318	7093	8189	9213
12	911	2014	2974	3997	5295	6338	7159	8284	9215
20	1001	2036	3045	4060	5345	6352	7172	8326	9311
33	1001	2111	3110	4081	5403	6386	7251	8366	9312
54	1072	2111	3149	4165	5414	6434	7343	8448	
88	1143	2186	3156	4173	5483	6516	7417	8473	
143	1149	2261	3202	4266	5663	6649	7486	8483	
232	1226	2314	3255	4268	5615	6667	7532	8518	
279	1309	2345	3257	4363	5660	6618	7550	8563	
318	1372	2429	3312	4364	5737	6687	7614	8643	
404	1421	2447	3369	4460	5762	6710	7696	8671	
432	1436	2452	3384	4460	5777	6802	7745	8682	
449	1436	2475	3456	4556	5817	6820	7779	8721	
494	1500	2503	3543	4652	5872	6833	7862	8771	
556	1579	2554	3605	4747	5967	6864	7882	8860	
566	1625	2633	3657	4841	6020	6908	7888	8902	
638	1653	2666	3674	4933	6071	6983	7914	8936	

† The process of finding a word within the Fibonacci sequence is as follows:

A. Initially, define the Fibonacci sequence modulo n , where each term is defined as:

$$F_i = (F_{i-1} + F_{i-2}) \bmod n,$$

with initial conditions $F_0 = 0$ και F_{i-1} , για $n \geq 0$
 $n \in \mathbb{N}^*$

B. The *Pisano Period* starts from the first term zero for Fibonacci numbers. It continues until the sequence of 0, 1 repeats, marking the end of the first cycle of infinite repetition of digits.

This means we seek the smallest $p > 0$ such that

$$F_p \bmod n = 0$$

and

$$F_{p+1} \bmod n = 1$$

The process for calculating the *Pisano Period* follows these basic steps:

1. Start with the Fibonacci sequence, where $F_0 = 0$ and $F_{i-1} = 1$

For each subsequent term, compute

$$F_i = F_{i-1} + F_{i-2} \bmod n,$$

where i is the index of the current term in the sequence defined each time as the dividend, and n is the *modulus* divisor for the *modulo* operation: extraction of remainders from the division.

2. Continue the calculation until you detect the consecutive repetition of the initial terms 0 and 1, marking the beginning of a new period.
3. The number of steps/terms required to reach this point of repetition is the *Pisano Period* $\pi(n)$.

C. Finding successive sums within the positions of periodic digits: Once the *Pisano Period* $\pi(n)$ is determined, the sum of its elements is calculated by successively adding the positions of the digits in ascending order within the period modulo n .

In mathematical formula, if $\pi(n)$ is the sequence of Fibonacci numbers modulo n before it begins to repeat, the sum of the positions is as follows:

$$Sum = \sum_{i=0}^{p-1} \pi(n)$$

where p is the length of the *Pisano Period* for the *modulus* n , and F_i represents the i -th Fibonacci number *modulo* n .

D. Next, a second *modulo* operation is applied, with *modulus* m , to each element of the Fibonacci sequence within a *Pisano Period*.

For the purpose of further analyzing the behavior of the Fibonacci sequence within a Pisano period under this additional restriction.

In the mathematical formula, it is expressed as follows:

$$[F_x \bmod n] \bmod m, \text{ για } m \geq 0$$

The new value is

$$G_i = F_x \bmod n, \text{ τότε } G_i \bmod m, m \in \mathbb{N}^*$$

G_i represents the modified Fibonacci number at the position i after the secondary *modulo* operation.

E. Based on the second modulo operation, Tables/Matrices are generated. These Tables contain single-digit numbers mapped to the digital roots of the 3x9 Table in the Greek Alphabet of 27 Letters.

F. The single-digit numbers, now acting as digital roots, are assigned to letters, and the words related to LIGHT [Φ Ω Σ] in this case appear in the tables.

Note: To select the *modulus* n an internal cyclical relationship is sought, inherently and somewhat inseparably linked to the numerical underlying system created by the words related to LIGHT ☿

G. The letters from the cells of tables/matrices are extracted to correct the syntagmatic sequential position of the letters of LIGHT, and they are placed at the perimeter's circle to redesign the word. This geometric tool, borrowed from Geometry and, consequently, the Arts and Architecture, is a tangible example of how different disciplines intersect in this project. Geometry serves as the foundation for the science of the Arts and Architecture.

† Overall, *Python* was used to calculate the entire system (freely available to the public). *Python*'s simple syntax and powerful libraries make it an excellent tool for mathematical computations, including the iterative processes and algorithmic solutions required to determine the *Pisano Period* for a given *modulus* n . By implementing a simple function, *Python* can efficiently calculate the period length during which the Fibonacci sequence *modulo* n or m repeats indefinitely. *Python* is a high-level, general-purpose programming language.

Exploring complex mathematical concepts and patterns in an instantaneous time frame is a challenge that requires a diverse team. Without a computer, the team would need excellent geometers and mathematicians to calculate the numbers with long divisions, another team to place them in tables, and a conductor to make decisions. This collaborative approach underscores the importance of teamwork and the diverse skills required for such projects.

† [online, Python Software] Available at <https://www.python.org/downloads>

On the next page, all the process *algorithmic codes* with *Python* are presented, leading to precise and accurate numerical results.


```

def calculate_pisano_period(modulo):
    previous, current = 0, 1
    for i in range(modulo * modulo):
        previous, current = current, (previous + current) % modulo
    # A Pisano Period starts with 01
    if previous == 0 and current == 1:
        return i + 1

def fibonacci(mod m, modulo):
    pisano_period = calculate_pisano_period(modulo)
    fib_sequence = [0, 1]
    for i in range(2, pisano_period + 1):
        fib_sequence.append(fib_sequence[-1] + fib_sequence[-2] % modulo)
    return fib_sequence[-1], pisano_period # Corrected to exclude only the last element which is the start of the new cycle

def divisors(n):
    divs = [1]
    for i in range(2, int(n**0.5) + 1):
        if n % i == 0:
            divs.extend([i, n // i])
    divs.append(n)
    return list(sorted(set(divs)))

def digital_root(n):
    while n > 9:
        n = sum(int(digit) for digit in str(n))
    return n

def print_tables(sequence, period, modulo):
    divs = divisors(period)
    print(f'{"modulo"} {period}')
    print(f'{"sequence"} {sequence}')
    print(f'{"period"} {period}')
    print(f'{"divisors"} {divs}')
    print(f'{"All possible table dimensions"}', ', '.join(f'{i}x{j}' for i in divs for j in divs))

for d in divs:
    rows, cols = d, period // d
    print(f'{"rows"} {rows}, {"cols"} {cols}')
    print(f'{"Table Dimension"} {rows}, {cols}')
    reshaped = [sequence[i::cols] for i in range(0, len(sequence), cols)]
    # Append row sums
    for row in reshaped:
        row_sum = sum(row)
        print(f'{"row sum"} {row_sum}')
        print(f'{"row sum"} {sum(row)} + f'{"row sum"} {row_sum} + f'{"digital root row sum"} {digital_root(row_sum)}')
    # Column sums and digital roots
    col_sums = [sum(reshaped[row][col] for col in range(len(reshaped))) for row in range(len(reshaped))]
    col_sums_dig = [digital_root(col_sum) for col in range(cols)]
    print(f'{"col sum"} {sum(row)} + f'{"col sum"} {sum(row)} + f'{"digital root col sum"} {digital_root(sum(row))}')
    print(f'{"col sum"} {sum(row)} + f'{"col sum"} {sum(row)} + f'{"digital root col sum"} {digital_root(sum(row))}')

modulo = int(input("Enter the modulo value for Pisano period calculation, related to the sequence of Fibonacci numbers: "))
sequence, period = fibonacci(modulo)
print_tables(sequence, period, modulo)

C Calculating Cumulative Sums of Fibonacci Numbers within the Pisano Period Modulo n

def calculate_pisano_period(divisor):
    """Returns the Pisano period for a given divisor"""
    fn = [0, 1]
    while True:
        fn.append(fn[-1] + fn[-2] % divisor)
        if fn[-1] == 1 and fn[-2] == 0:
            return fn[-2] # Excludes the last two elements (0, 1) which start the new cycle

def print_cumulative_sums(n):
    lst = num_calculate_pisano_period(n)
    cumulative_sum = 0
    cumulative_sums = []
    for num in lst:
        cumulative_sum += num
        cumulative_sums.append(cumulative_sum)
    return cumulative_sums

# Example usage
n = int(input("Enter the modulo value for Pisano period calculation: "))
cumulative_sums = calculate_pisano_period(n)
print(f"Cumulative sums of the elements in the Pisano period for modulo {n} are")
print(cumulative_sums)

```

```
def calculate_pisano_period(modulo):
    previous, current = 0, 1
    for i in range(modulo * modulo):
        previous, current = current, previous + current % modulo
    # A Pisano Period starts with 01
    if previous == 0 and current == 1:
        return i + 1

def fibonacci_mod_m(modulo):
    pisano_period = calculate_pisano_period(modulo)
    fib_sequence = [0, 1]
    for i in range(2, pisano_period + 1):
        fib_sequence.append(fib_sequence[i - 1] + fib_sequence[i - 2] % modulo)
    return fib_sequence[-1], pisano_period # Exclude only the last element which is the start of the new cycle
```

```
def divisors(n):
    divs = [1]
    for i in range(2, int(n**0.5) + 1):
        if n % i == 0:
            divs.extend([i, n // i])
    divs.append(n)
    return list(sorted(set(divs)))
```

```
def digital_root(n):
    while n > 9:
        n = sum(int(digit) for digit in str(n))
    return n
```

```
def print_tables(sequence, period, modulo_x, modulo_y):
    divs = divisors(period)
    print(f"""{modulo_x} {period}, Number of zeros in the cycle: {sequence.count(0)}""")
    print("All possible table dimensions:", *join(f"{d} x {period // d}" for d in divs))

    for d in divs:
        rows, cols = d, period // d
        print(f"""nTable Dimension: {rows} x {cols}""")
        reshaped = [sequence[i*cols:] for i in range(0, len(sequence), cols)]

        for row in reshaped:
            modified_row = [x % modulo_y for x in row] # Apply the second modulo operation to each element
            row_sum = sum(modified_row)
            print(join(str(x).ljust(3) for x in modified_row) + f""" {row_sum, '{row_sum}'.ljust(5)} + {digital_root(row_sum)}""")

        # Column sums and digital roots after applying modulo_y to each position
        col_sums = [sum(reshaped[row][col] % modulo_y if col < len(reshaped[row]) else 0 for row in range(len(reshaped))) for col in range(cols)]
        col_sums_dr = [digital_root(col_sums[col]) for col in range(cols)]
        print(join(str(x).ljust(3) for x in col_sums) + f""" {sum(col_sums), '{sum(col_sums)'.ljust(5)} + {digital_root(sum(col_sums))}""")
        print(join(str(x).ljust(3) for x in col_sums_dr)
```

```
# Main script execution
```

```
modulo_x = int(input("Enter the modulo value for Pisano period calculation (related to the sequence of Fibonacci numbers): ")
sequence, period = fibonacci_mod_m(modulo_x)
modulo_y = int(input("Enter the second modulo value to modify each position in the table: ")
print_tables(sequence, period, modulo_x, modulo_y)
```

GREEK ALPHABET | CIRCLE | 27 LETTERS | 25

Φ Ω Σ (phôs), ΦΟΩΣ (phóōs), Φ Α Ο Σ (pháos), Φ Α Ξ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos)

OBSERVATIONS © Petras Petros 2021-23, Phos, Greek Alphabet Design Observatory Athens, Greece

E 1 Text Normalization and Diacritical Mark Removal in Python with Optional Tilde Appending

```
import unicodedata
```

```
# Function to convert text according to specified transtormations and remove diacritical marks
def process_text(text, keep_tilde):
    # Normalize text to NFD to separate characters from their diacritics (accents)
    normalized_text = unicodedata.normalize('NFD', text)
    # Remove diacritics
    without_diacritics = ''.join(char for char in normalized_text if unicodedata.category(char) != 'Mn')
    # Convert to uppercase and replace Ì with Î™
    processed_text = without_diacritics.upper().replace('Ì', 'Î™')
    # Add a tilde at the end of each line if keep_tilde is True
    if keep_tilde:
        processed_text = '\n'.join(line + '~' for line in processed_text.splitlines())
    return processed_text
```

```
# Ask the user to provide the original text
print("Please enter the original text (paste your text and press Enter twice to finish): ")
input_lines = []
while True:
    line = input()
    if line:
        input_lines.append(line)
    else:
        break
original_text = '\n'.join(input_lines)
```

```
# Ask the user if they want to keep the tilde at the end of each line
user_input = input("Do you want to keep the tilde at the end of each line? (yes/no): ").lower()
```

```
# Process the text based on user input
keep_tilde = user_input == 'yes'
processed_text = process_text(original_text, keep_tilde)
```

```
# Print the processed text
print("\nProcessed Text:")
print(processed_text)
```

GREEK ALPHABET | CIRCLE | 27 LETTERS |

OBSERVATIONS

Φ Ω Σ (phôs), Φ Ο Ω Σ (phóōs), Φ Α Ο Σ (pháos)
Φ Α Ξ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 26

E 2 Advanced Gematria Calculator with Digital Root Analysis and Custom Alphabet Support in Python

```
import re

def digital_root(n):
    """Calculate the digital root of a number, working with integers."""
    while n > 9:
        n = sum(int(digit) for digit in str(n))
    return n

def calculate_gematria(sum_word, letter_values, use_decimals):
    """Calculate the gematria sum of a word based on the provided letter values, optionally keeping decimals."""
    sum_result = sum(letter_values.get(char, 0) for char in re.sub(r'[ ,#~]', '', word))
    if not use_decimals:
        return round(sum_result)
    return sum_result

def print_gematria_for_sentence(sentence, letter_values, table_number, use_decimals):
    """Print the gematria values and digital roots for each word in a sentence, adjusting spacing based on content."""
    words = re.findall(r'\b\w+[ ,#~]*', sentence)
    word_sums = [calculate_gematria(sum_word, letter_values, use_decimals) for word in words]
    digital_roots = [digital_root(round(s)) for s in word_sums]

    total_value = sum(word_sums)
    max_word_length = max(len(word) for word in words, default=0)
    max_sum_length = max(len(f'{s:2f}' if use_decimals else f'{int(round(s))}') for s in word_sums, default=0)
    space_adjustment = max(max_word_length, max_sum_length, 12) + 2

    dr_table_number = digital_root(int(''.join(filter(str.isdigit, str(table_number)))))
    print(f'{n[table_number]} TABLE OF WORDS D.R. {dr_table_number, n}')
    for word in words:
        print(f'{word}{' ' * space_adjustment}', end='')
    print()
    for s in word_sums:
        format_str = f'{s:2f}' if use_decimals else f'{int(round(s))}'
        print(format_str, format(s) if use_decimals else int(round(s)), '{' ' * space_adjustment}', end='')
    print('n')
    for dr in digital_roots:
        print(f'{dr, ' * space_adjustment}', end='')

    if use_decimals:
        print(f'n nTotal Value {total_value:2f}')
    else:
        print(f'n nTotal Value {int(round(total_value))}')
    dr_sum = sum(digital_roots)
    print(f'Sum of D.R. {dr_sum}, D.R. of {dr_sum} {digital_root(dr_sum)}')
    print('~~~~~')

def setup_alphabet():
    """Set up the alphabet and its corresponding gematria values with enhanced error handling."""
    while True:
```

```
        try:
            alphabet = input('Define all characters in the alphabet separated by comma, e.g., A, B, C. ')
            alphabet = [char.strip() for char in alphabet.split(',')]
            if len(alphabet) != len(set(alphabet)):
                raise ValueError('Duplicate characters detected. Each character must be unique.')
            values = input('Define the value of every letter (e.g., 1, 2, 5, 1000). ')
            values = [float(value.strip()) for value in values.split(',')]
            if len(alphabet) != len(values):
                raise ValueError('The number of values must match the number of characters in the alphabet.')
            return {char: value for char, value in zip(alphabet, values)}
        except ValueError as e:
            print(f'Error: {e}. Please try again.')

def get_separators():
    """Get the user-defined separators for breaking tables."""
    separators = input('Define separators (dot, comma, etc.) to break the input into multiple tables, or specify NO to treat everything as one table. ')
    if separators.strip().upper() == 'NO':
        return None
    else:
        return separators.strip().split()

def main():
    use_decimals = input('Will you be using decimal numbers? yes/no: ').lower().startswith('y')
    print('Setup your alphabet and values.')
    letter_values = setup_alphabet()
    separators = get_separators()

    print('nEnter your words or sentences. Type FND to stop.')
    table_number = 1
    while True:
        user_input = input('nType a word or sentence (or FND) to finish. ')
        if user_input.strip().upper() == 'FND':
            print('Ending the program. Thank you for using the Gematria Calculator.')
            break

        if separators:
            pattern = f'({ '|'.join([re.escape(sep) for sep in separators])})+'
            sentences = re.split(pattern, user_input)
            sentences = [''.join(sentences[i:i+2]) for i in range(0, len(sentences), 2)]
        else:
            sentences = [user_input]

        for sentence in sentences:
            if sentence: # Ensure the sentence is not empty
                print_gematria_for_sentence(sentence, letter_values, table_number, use_decimals)
                table_number += 1
```

```
if __name__ == '__main__':
    main()
```


[illegible][illegible][illegible]

	F ₂ (mod 97) - cycle																												TABLE 7x28													Sum	Γ ₁
1st row	0	1	1	2	3	5	8	13	21	34	55	89	47	39	86	28	17	45	62	10	72	82	57	42	2	44	46	90		1446	6												
2nd row	39	32	71	6	77	83	63	49	15	64	79	46	28	74	5	79	84	66	53	22	75	0	75	75	53	31	84	18		1296	9												
3rd row	5	23	28	51	79	33	15	48	63	14	77	91	71	65	39	7	46	53	2	55	57	15	72	87	62	52	17	69		1660	4												
4th row	86	58	47	8	55	63	21	84	8	92	3	95	1	96	0	96	96	95	94	92	89	84	76	63	42	8	50	58		1307	2												
5th row	11	69	80	52	35	87	25	15	40	55	95	53	51	7	58	65	26	91	20	14	34	48	82	33	18	51	69	23		1236	3												
6th row	92	18	13	31	44	75	22	0	22	22	44	66	13	79	92	74	69	46	18	64	82	49	34	83	20	6	26	32		1366	7												
7th row	58	90	51	44	95	42	40	82	25	10	35	45	80	28	11	39	50	89	42	34	76	13	89	5	94	2	96	1		1366	9312												
Sum	291	291	291	194	388	388	194	291	194	291	388	485	291	388	291	388	388	485	291	291	485	291	485	388	291	194	388	291		9312													
	3	3	3	5	1	1	5	3	5	3	1	8	3	1	3	1	1	8	3	3	8	3	8	1	3	5	1	3		6													

[illegible]

F _n (mod 97) - cycle					Sum	Γ ₁	
TABLE 49x4							
	0	1	1	2		4	4
	3	5	8	13		29	2
	21	34	55	89		199	1
	47	39	86	28		200	2
	17	45	62	10		134	8
	72	82	57	42		253	1
	2	44	46	90		182	2
	39	32	71	6		148	4
	77	83	63	49		272	2
	15	64	79	46		204	6
	28	74	5	79		186	6
	84	66	53	22		225	9
	75	0	75	75		225	9
	53	31	84	18		186	6
	5	23	28	51		107	8
	79	33	15	48		175	4
	63	14	77	91		245	2
	71	65	39	7		182	2
	46	53	2	55		156	3
	57	15	72	87		231	6
	62	52	17	69		200	2
	86	58	47	8		199	1
	55	63	21	84		223	7
	8	92	3	95		198	9
	1	96	0	96		193	4
	96	95	94	92		377	8
	89	84	76	63		312	6
	42	8	50	58		158	5
	11	69	80	52		212	5
	35	87	25	15		162	9
	40	55	95	53		243	9
	51	7	58	65		181	1
	26	91	20	14		151	7
	34	48	82	33		197	8
	18	51	69	23		161	8
	92	18	13	31		154	1
	44	75	22	0		141	6
	22	22	44	66		154	1
	13	79	92	74		258	6
	69	46	18	64		197	8
	82	49	34	83		248	5
	20	6	26	32		84	3
	58	90	51	44		243	9
	95	42	40	82		259	7
	25	10	35	45		115	7
	80	28	11	39		158	5
	50	89	42	34		215	8
	76	13	89	5		183	3
	94	2	96	1		193	4
Sum	1164	1358	1164	1164	9312	6	
D.R.	6	6	6	6			

	[...]*	Sum	Γ_i
0	96	96	6
96	95	191	2
94	92	186	6
89	84	173	2
76	63	139	4
42	8	50	5
50	58	108	9
11	69	80	8
80	52	132	6
35	87	122	5
25	15	40	4
40	55	95	5
95	53	148	4
51	7	58	4
58	65	123	6
26	91	117	9
20	14	34	7
34	48	82	1
82	33	115	7
18	51	69	6
69	23	92	2
92	18	110	2
13	31	44	8
44	75	119	2
22	0	22	4
22	22	44	8
44	66	110	2
13	79	92	2
92	74	166	4
69	46	115	7
18	64	82	1
82	49	131	5
34	83	117	9
20	6	26	8
26	32	58	4
58	90	148	4
51	44	95	5
95	42	137	2
40	82	122	5
25	10	35	8
35	45	80	8
80	28	108	9
11	39	50	5
50	89	139	4
42	34	76	4
76	13	89	8
89	5	94	4
94	2	96	6
96	1	97	7
4656	4656	9312	6
3	3	6	

† After forming all possible Tables via Python calculations, I investigate the Tables of dimensions (4x49) and (98x2).

~ ~ ~ ∴ ~ ~ ~

Step 1: In Tables (4x49) & (98x2), the numbers of the periodic sequence $F_n(\text{mod } 97)$ are replaced by the sums of the two preceding numbers per position, moving from left to right.

In the sum tables, the sums of the alphanumeric equalities of the words for light and wise ('ΣΟΦΟΣ' [=WISE]=1040) are observed.

The above leads to the investigation of the words within the Tables (4x49) & (98x2) of $F_n(\text{mod } 97)$, as it represents a potential aggregation of these words.

Step 2: Decades and hundreds are eliminated using *modulus 9* for each numeric position of the sequence $[F_n(\text{mod } 97) - \text{cycle}]$. This step ensures that only single-digit numbers appear in each position with a maximum number of 8. It is noted that the maximum number depends on the maximum D.R. of the letters in the words for light, which is omega [=Ω=800, D.R. of Ω=8].

Each unit now corresponds to letters of the alphabet, as the unit represents an underlying numeric value. Explicitly, this numeric value can equate to the D.R. of each letter.

Step 3: Within this framework, replacements (from number to letter) are made to find the words for light. Some roots and morphemes are identified, which, after anagrams, form the ancient words for light. Anagrams are valid once the words are rendered in a circle.

[About anagrams: Koerner, E. F. K., Embleton, Sheila M., Joseph, John Earl, & Niederehe, Hans-Josef (Eds.) (1999). *The emergence of the modern language sciences: studies on the transition from historical- comparative to structural linguistics in honour of E.F.K. Koerner* (p.145). John Benjamins Publishing Company. Available at: https://openlibrary.org/books/OL44443M/The_emergence_of_the_modern_language_sciences]

Step 4: Straight lines connect the synecdochic points in the circle, forming the ancient Greek words for light (instead of anagrams).

The circle is a geometric mechanism that produces words.

RESULT: The roots ΦΑΞ- (of the Aeolic Type 'ΦΑΞΟΣ'), 'ΦΑΞ-' (of the Epic Type 'ΦΑΞΟΣ'), the lexical morphemes 'ΦΑΞ-' (of the Aeolic and Epic Type 'ΦΑΞΟΣ'), 'ΘΕΞ-' (of the word of GOD [=ΘΕΞΟΣ]), and the words 'ΦΑΞΟΣ,' 'ΦΑΞΟΣ,' 'ΦΩΞΟΣ,' & 'ΘΕΞΟΣ' [=GODS]

appear. In the tables (during **Step 3**), the arrangement of the letters corresponds to the underlying logic of hieroglyphs in papyri and Byzantine papyrography, where decorative letters are arranged vertically or in a cross to condense certain meanings.. ‡

~ ~ ~ ∴ ~ ~ ~

† The number 14 is observed in the vertical columns, which is the sum of the digits of the alphanumeric equivalence (286) of the words 'ΘΕΞΟΣ'- 'ΑΓΑΘΟΣ'- 'ΑΓΙΟΣ' [=GOD-GOOD-SAINT]. At the same time, the lexical morpheme of God [= 'ΘΕΞ-'] appears in the column of the digital roots from the sums of each row in the Table (4x49).

Additionally, the words 'ΘΕΑ' [=Goddess] and 'ΘΕΞ' [=Gods] appear within the Table (98x2). ‡

This process is an algorithmic mechanism of the author through an intuitive effort, inventive and combinatorial thinking, and architectural education and training at the National Technical University of Athens. ‡

Step 1																										
	$F_1(\text{mod } 97)=0, F_1(\text{mod } 10)+F_2(\text{mod } 97) = 1, \dots, F_1(\text{mod } 97)+\dots+F_5(\text{mod } 97) = 7, \dots, F_1(\text{mod } 97)+\dots+F_{196}(\text{mod } 10) = 9312$																									
TABLE 4x49																										
1st row	0	1	2	4	7	12	20	33	54	88	143	232	279	318	404	432	449	494	556	566	638	720	777	819	[...]*	
2nd row	2111	2186	2261	2314	2345	2429	2447	2452	2475	2503	2554	2633	2666	2681	2729	2792	2806	2883	2974	3045	3110	3149	3156	3202		
3rd row	4460	4556	4652	4747	4841	4933	5022	5106	5182	5245	5287	5295	5345	5403	5414	5483	5563	5615	5650	5737	5762	5777	5817	5872		
4th row	7005	7027	7049	7093	7159	7172	7251	7343	7417	7486	7532	7550	7614	7696	7745	7779	7862	7882	7888	7914	7946	8004	8094	8145		

1st row	[...]*	821	865	911	1001	1040	1072	1143	1149	1226	1309	1372	1421	1436	1500	1579	1625	1653	1727	1732	1811	1895	1961	2014	2036	2111			
2nd row		3255	3257	3312	3369	3384	3456	3543	3605	3657	3674	3743	3829	3887	3934	3942	3997	4060	4081	4165	4173	4265	4268	4363	4364	4460			
3rd row		5967	6020	6071	6078	6136	6201	6227	6318	6338	6352	6386	6434	6516	6549	6567	6618	6687	6710	6802	6820	6833	6864	6908	6983	7005			
4th row		8189	8284	8326	8366	8448	8473	8483	8518	8563	8643	8671	8682	8721	8771	8860	8902	8936	9012	9025	9114	9119	9213	9215	9311	9312			

Step 1 $F_1(\text{mod } 97)+\dots+ F_{196}(\text{mod } 10) = 9312$ TABLE 98x2	
0	1
2	4
7	12
20	33
54	88
143	232
279	318
404	432
449	494
556	566
638	720
777	819
821	865
911	1001
1040	1072
1143	1149
1226	1309
1372	1421
1436	1500
1579	1625
1653	1727
1732	1811
1895	1961
2014	2036
2111	2111
2186	2261
2314	2345
2429	2447
2452	2475
2503	2554
2633	2666
2681	2729
2792	2806
2883	2974
3045	3110
3149	3156
3202	3255
3257	3312
3369	3384
3456	3543
3605	3657
3674	3743
3829	3887
3934	3942
3997	4060
4081	4165
4173	4265
4268	4363
4364	4460
[...]*	

[...]*	
4460	4556
4652	4747
4841	4933
5022	5106
5182	5245
5287	5295
5345	5403
5414	5483
5563	5615
5650	5737
5762	5777
5817	5872
5967	6020
6071	6078
6136	6201
6227	6318
6338	6352
6386	6434
6516	6549
6567	6618
6687	6710
6802	6820
6833	6864
6908	6983
7005	7005
7027	7049
7093	7159
7172	7251
7343	7417
7486	7532
7550	7614
7696	7745
7779	7862
7882	7888
7914	7946
8004	8094
8145	8189
8284	8326
8366	8448
8473	8483
8518	8563
8643	8671
8682	8721
8771	8860
8902	8936
9012	9025
9114	9119
9213	9215
9311	9312

GREEK ALPHABET | CIRCLE | 27 LETTERS

OBSERVATIONS

Φ Ω Σ (phôs), Φ Ω Σ (phóōs), Φ Α Ο Σ (pháos)
Φ Α Ξ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 30

F _n (mod 97) - cycle TABLE 98x2		ω	Sum	Γ ₁
0	1		1	1
1	2		3	3
3	5		8	8
8	13		21	3
21	34		55	1
55	89		144	9
47	39		86	5
86	28		114	6
17	45		62	8
62	10		72	9
72	82		154	1
57	42		99	9
2	44		46	1
46	90		136	1
39	32		71	8
71	6		77	5
77	83		160	7
63	49		112	4
15	64		79	7
79	46		125	8
28	74		102	3
5	79		84	3
84	66		150	6
53	22		75	3
75	0		75	3
75	75		150	6
53	31		84	3
84	18		102	3
5	23		28	1
28	51		79	7
79	33		112	4
15	48		63	9
63	14		77	5
77	91		168	6
71	65		136	1
39	7		46	1
46	53		99	9
2	55		57	3
57	15		72	9
72	87		159	6
62	52		114	6
17	69		86	5
86	58		144	9
47	8		55	1
55	63		118	1
21	84		105	6
8	92		100	1
3	95		98	8
1	96		97	7
[...]*				
4656		4656	9312	6
3		3	6	

[...]*		Sum	Γ ₁
0	96	96	6
96	95	191	2
94	92	186	6
89	84	173	2
76	63	139	4
42	8	50	5
50	58	108	9
11	69	80	8
80	52	132	6
35	87	122	5
25	15	40	4
40	55	95	5
95	53	148	4
51	7	58	4
58	65	123	6
26	91	117	9
20	14	34	7
34	48	82	1
82	33	115	7
18	51	69	6
69	23	92	2
92	18	110	2
13	31	44	8
44	75	119	2
22	0	22	4
22	22	44	8
44	66	110	2
13	79	92	2
92	74	166	4
69	46	115	7
18	64	82	1
82	49	131	5
34	83	117	9
20	6	26	8
26	32	58	4
58	90	148	4
51	44	95	5
95	42	137	2
40	82	122	5
25	10	35	8
35	45	80	8
80	28	108	9
11	39	50	5
50	89	139	4
42	34	76	4
76	13	89	8
89	5	94	4
94	2	96	6
96	1	97	7
[...]*			
4656		9312	6
3		6	

[F _n (mod 97)] (mod 9) - cycle TABLE 98x2		Sum	Γ ₁
0	1	1	1
1	2	3	3
3	5	8	8
8	4	12	3
3	7	10	1
1	8	9	9
2	3	5	5
5	1	6	6
8	0	8	8
8	1	9	9
0	1	1	1
3	6	9	9
2	8	10	1
1	0	1	1
3	5	8	8
8	6	14	5
5	2	7	7
0	4	4	4
6	1	7	7
7	1	8	8
1	2	3	3
5	7	12	3
3	3	6	6
8	4	12	3
3	0	3	3
3	3	6	6
8	4	12	3
3	0	3	3
5	5	10	1
1	6	7	7
7	6	13	4
6	3	9	9
0	5	5	5
5	1	6	6
8	2	10	1
3	7	10	1
1	8	9	9
2	1	3	3
3	6	9	9
0	6	6	6
8	7	15	6
8	6	14	5
5	4	9	9
2	8	10	1
1	0	1	1
3	3	6	6
8	2	10	1
3	5	8	8
1	6	7	7
[...]*			
426		372	6
3		6	

[...]*		Sum	Γ ₁
0	6	6	6
6	5	11	2
4	2	6	6
8	3	11	2
4	0	4	4
6	8	14	5
5	4	9	9
2	6	8	8
8	7	15	6
8	6	14	5
7	6	13	4
4	1	5	5
5	8	13	4
6	7	13	4
4	2	6	6
8	1	9	9
2	5	7	7
7	3	10	1
1	6	7	7
0	6	6	6
6	5	11	2
2	0	2	2
4	4	8	8
8	3	11	2
4	0	4	4
4	4	8	8
8	3	11	2
4	7	11	2
2	2	4	4
6	1	7	7
0	1	1	1
1	4	5	5
7	2	9	9
2	6	8	8
8	5	13	4
4	0	4	4
6	8	14	5
5	6	11	2
4	1	5	5
7	1	8	8
8	0	8	8
8	1	9	9
2	3	5	5
5	8	13	4
6	7	13	4
4	4	8	8
8	5	13	4
4	2	6	6
6	1	7	7
[...]*			
426		798	6
3		6	

[F _n (mod 97)] (mod 9) - cycle TABLE 98x2		Sum	Γ ₁
0	1	1	1
1	2	3	3
3	5	8	8
8	4	12	3
3	7	10	1 = A
1	8	9	9 = Θ
2 = Σ	3	5	5 = E
5 = Φ	1	6	6
8 = Ω	0	8	8
8	1	9	9
0	1	1	1
3	6	9	9
2	8	10	1 + 1 = 2
1	0	1	2 = Σ
3	5	8	8 = Ω
8	6	14	5 = Φ
5	2	7	7 = O
0	4	4	4
6	1	7	7
7	1	8	8
1	2	3	3
5	7	12	3
3	3	6	6
8	4	12	3
3	0	3	3
3	3	6	6
8	4	12	3
3	0	3	3
5 = Φ	5 = E	10	1
1 = A	6	7	7
7 = O	6	13	4
6	3	9	9
0	5 = Φ	5	5 = Φ
5 = Φ	1 = A	6 = Ξ	6 = Ξ
8	2 = Σ	10	1 = A
3	7 = O	10	1
1	8	9	9
2	1	3	3
3	6	9	9
0	6	6	6
8	7	15	6
8 = Ω	6	14	5
5 = Φ	4	9	9
2 = Σ	8	10	1
1	0	1	1
3	3	6	6
8	2	10	1
3	5	8	8
1	6	7	7
[...]*			
426		798	6
3		6	

[...]*		Sum	Γ ₁
0	6	6	6
6	5	11	2
4	2	6	6
8	3	11	2
4	0	4	4
6	8	14	5
5 = Φ	4	9	9
2 = Σ	6	8	8
8 = Ω	7	15	6
8	6	14	5
7	6	13	4
4	1	5	5
5	8	13	4
6	7 = O	13	4 + 6 = 10 = 1
4	2 = Σ	6	9 = Θ
8	1 = A	9	7 = O
2	5 = Φ	7	1 + 7 + 6 = 14
7	3	10	DR(14) = 5
1	6	7	5 = E
0	6	6	
6	5	11	2
2	0	2	2
4	4	8	8
8	3	11	2
4	0	4	4
4	4	8	8
8	3	11	2
4	7	11	2
2	2	4	4
6	1	7	7
0	1	1	1 = A
1	4	5	5 = E
7	2	9	9 = Θ
2	6	8	8
8	5	13	4
4	0	4	4
6	8	14	5
5	6	11	2
4	1 = A	5 = Φ	5 = E
7 = O	1	8	8
8 = Ω	0	8	8
8 = Ω	1	9	9
2 = Σ	3	5	5
5 = Φ	8 = Ω	13	4
6	7	13	4
4	4	8	8
8	5	13	4
4	2	6	6
6	1	7	7
[...]*			
426		798	6
3		6	

GREEK ALPHABET | CIRCLE | 27 LETTERS

OBSERVATIONS

Φ Ω Σ (phōs), Φ Ω Σ (phōōs), Φ Α Ο Σ (pháos)
Φ Α Ξ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 31

Step 4

Aeolic and Epic Type

1 2 3 4
Φ Α Ο Σ
500 1 70 200

"LIGHT" phaos
771

5 1 7 2
Φ Α Ο Σ

7+7+1
15
1+5

Attic Type
contracted

1 2 3
Φ Ω Σ
500 800 200

"LIGHT" phōs
1500

5 8 2
Φ Ω Σ

1+5+0+0
6

Epic Type

1 2 3 4
Φ Ο Ω Σ
500 70 800 200

"LIGHT" phōōs
1570

5 7 8 2
Φ Ο Ω Σ

1+5+7+0
13
1+3
4

Aeolic Type

1 2 3 4 5
Φ Α Ξ Ο Σ
500 1 6 70 200

"LIGHT" phawos
777

5 1 6 7 2
Φ Α Ξ Ο Σ

7+7+7
21
2+1

Epic Type

1 2 3 4 5
Φ Α Ε Ο Σ
500 1 5 70 200

"LIGHT" phaeos
776

5 1 5 7 2
Φ Α Ε Ο Σ

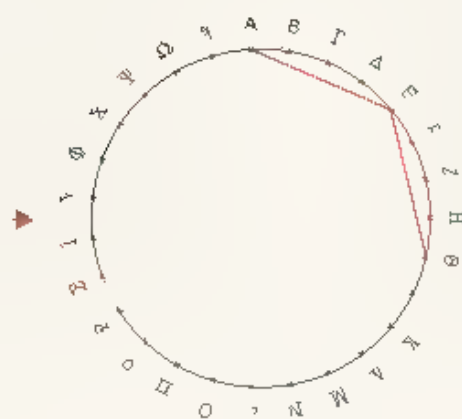
7+7+6
20
2+0

Α Ε Θ



the word of "GODDESS" the a

Θ Ε Α

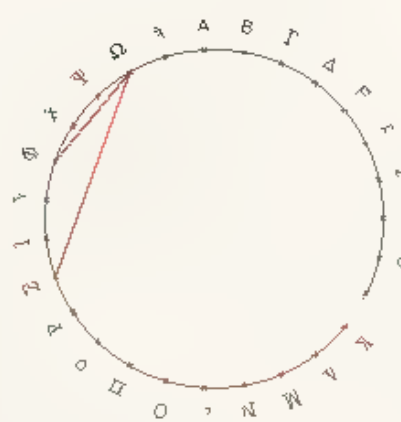


Σ Φ Ω + Ω Φ Σ

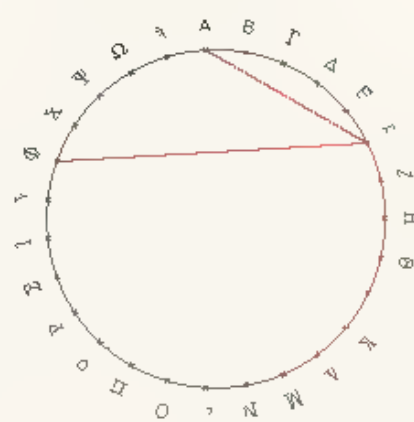


the word of "LIGHT" phōs

Φ Ω Σ



Φ Ξ Α



the root of "LIGHT" phawos

Φ Α Ξ

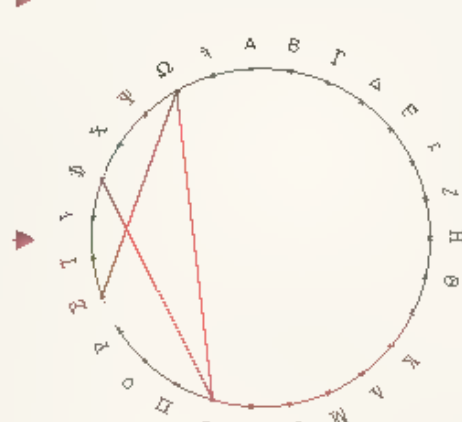


Ι Θ Ο Ε



the word of "GODS"

Θ Ε Ο Ι



the word of "LIGHT" phaos

Φ Α Σ Ο + Φ Α Ο



Φ Α Ο Σ



Α Φ Ε + Ο Α Φ Ε



the root of "LIGHT" phaeos

Φ Α Ε Ο

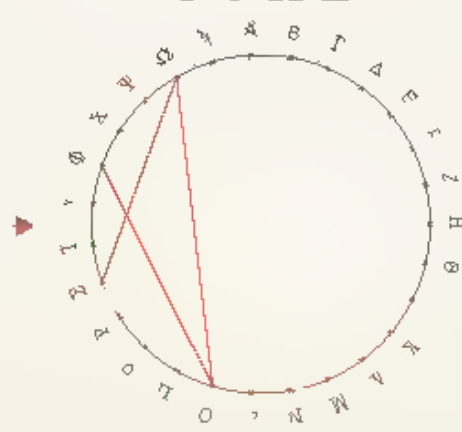


Ο Ω Ω Σ Φ + Σ Ω Φ Ο



the word of "LIGHT" phōōs

Φ Ο Ω Σ



Step 1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	F _n (mod 97) - cycle TABLE 4x49																																																Sum	□																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
1st row	0	1	1	2	3	5	8	13	21	34	55	89	47	39	86	28	17	45	62	10	72	82	57	42	2	44	46	90	39	32	71	6	77	83	63	49	15	64	79	46	28	74	5	79	84	66	53	22	75		2111	5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
2nd row	0	75	75	53	31	84	18	5	23	28	51	79	33	15	48	63	14	77	91	71	65	39	7	46	53	2	55	57	15	72	87	62	52	17	69	86	58	47	8	55	63	21	84	8	92	3	95	1	96		2349	9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
3rd row	0	96	96	95	94	92	89	84	76	63	42	8	50	58	11	69	80	52	35	87	25	15	40	55	95	53	51	7	58	65	26	91	20	14	34	48	82	33	18	51	69	23	92	18	13	31	44	75	22		2545	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
4th row	0	22	22	44	66	13	79	92	74	69	46	18	64	82	49	34	83	20	6	26	32	58	90	51	44	95	42	40	82	25	10	35	45	80	28	11	39	50	89	42	34	76	13	89	5	94	2	96	1		2307	3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												



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1st row	0	1	1	2	3	5	8	4	3	7	1	8	2	3	5	2	8	0	8	1	0	1	3	6	2	8	1	0	3	5	8	6	5	2	0	4	6	1	7	1	1	2	5	7	3	3	8	4	3		176	5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
2nd row	0	3	3	8	4	3	0	5	5	1	6	7	6	6	3	0	5	5	1	8	2	3	7	1	8	2	1	3	6	0	6	8	7	8	6	5	4	2	8	1	0	3	3	8	2	3	5	1	6		198	9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
3rd row	0	6	6	5	4	2	8	3	4	0	6	8	5	4	2	6	8	7	8	6	7	6	4	1	5	8	6	7	4	2	8	1	2	5	7	3	1	6	0	6	6	5	2	0	4	4	8	3	4		223	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
4th row	0	4	4	8	3	4	7	2	2	6	1	0	1	1	4	7	2	2	6	8	5	4	0	6	8	5	6	4	1	7	1	8	0	8	1	2	3	5	8	6	7	4	4	8	5	4	2	6	1		201	3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														

[illegible]

GREEK ALPHABET | CIRCLE | 27 LETTERS

OBSERVATIONS

Φ Ω Σ (phôs), Φ Ω Ω Σ (phóōs), Φ Α Ο Σ (pháos)
Φ Α Ξ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 33

Step 4

Aeolic and Epic Type

1 2 3 4
Φ Α Ο Σ
500 1 70 200

“ LIGHT ” (pháos)

771

5 1 7 2
Φ Α Ο Σ

7+7+1
15
1+5

Attic Type
(contracted)

1 2 3
Φ Ω Σ
500 800 200

“ LIGHT ” (phôs)

1500

5 8 2
Φ Ω Σ

1+5+0+0
6

Epic Type

1 2 3 4
Φ Ο Ω Σ
500 70 800 200

“ LIGHT ” (phóos)

1570

5 7 8 2
Φ Ο Ω Σ

1+5+7+0
13
1+3
4

Aeolic Type

1 2 3 4 5
Φ Α Ξ Ο Σ
500 1 6 70 200

“ LIGHT ” (phawos)

777

5 1 6 7 2
Φ Α Ξ Ο Σ

7+7+7
21
2+1

Epic Type

1 2 3 4 5
Φ Α Ε Ο Σ
500 1 5 70 200

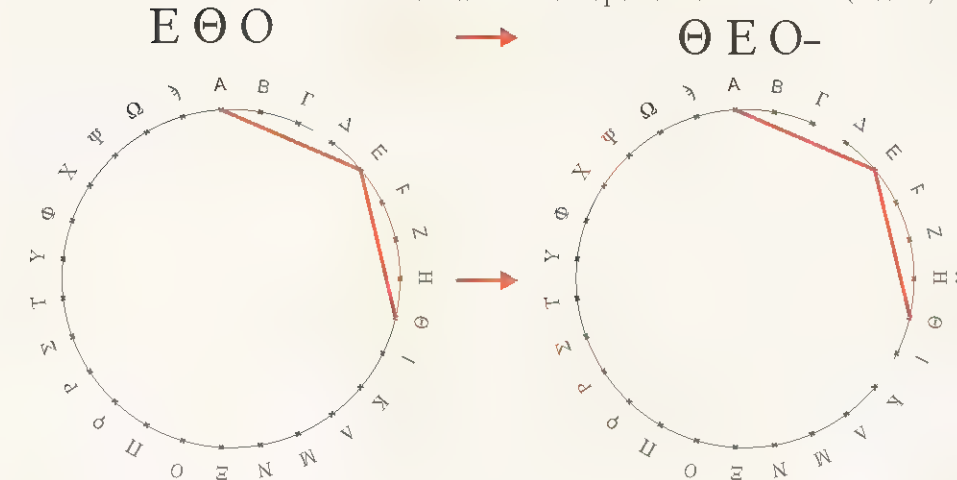
“ LIGHT ” (pháeos)

776

5 1 5 7 2
Φ Α Ε Ο Σ

7+7+6
20
2+0

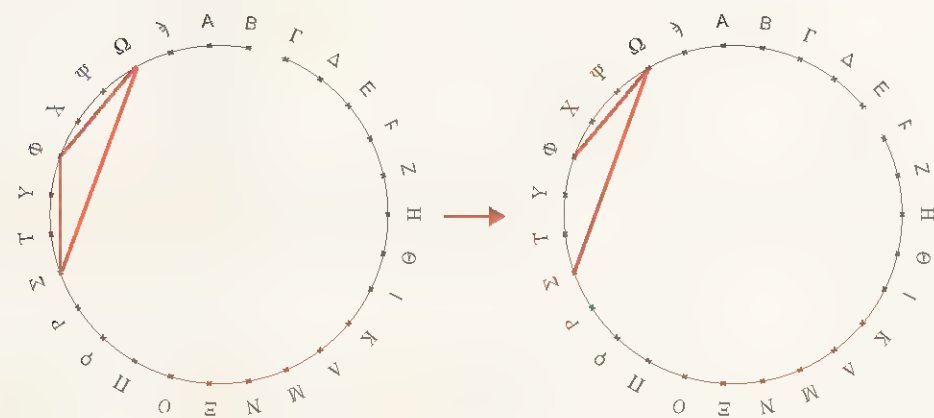
the lexical morpheme of “ GOD ” (theos)



the word of “ LIGHT ” (phôs)

Σ Ω Φ + Σ Φ Ω

Φ Ω Σ



the root and the lexical morpheme of “ LIGHT ” (phawos)

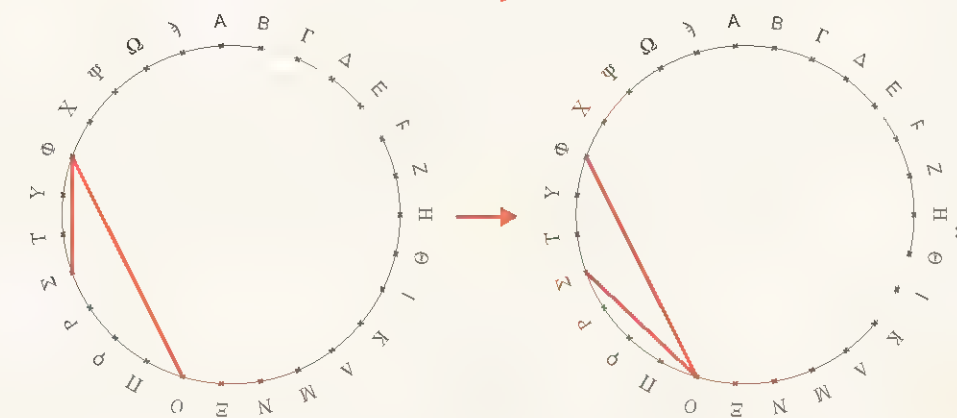
Φ Α Ξ - + Φ Α Ξ Ο -



the root of “ WISE ” and the word “ WISE ” /so'fos/
due to the same letters

Σ Φ Ο

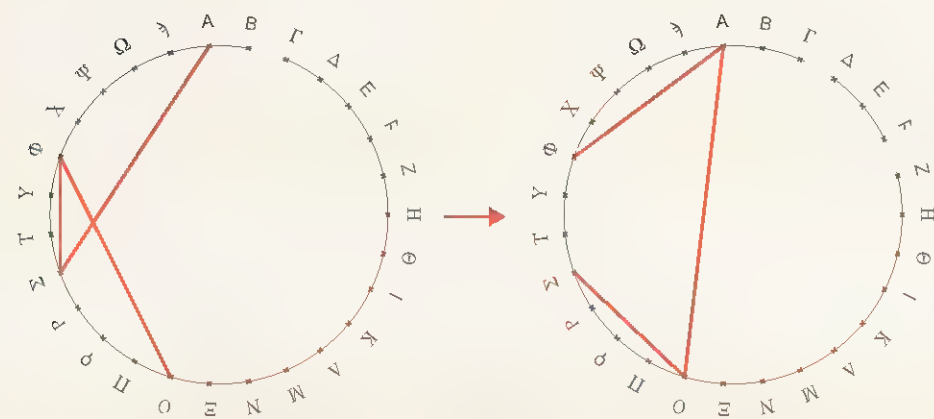
Σ Ο Φ - | Σ Ο Φ Ο Σ



the word of “ LIGHT ” (pháos)

Α Σ Φ Ο

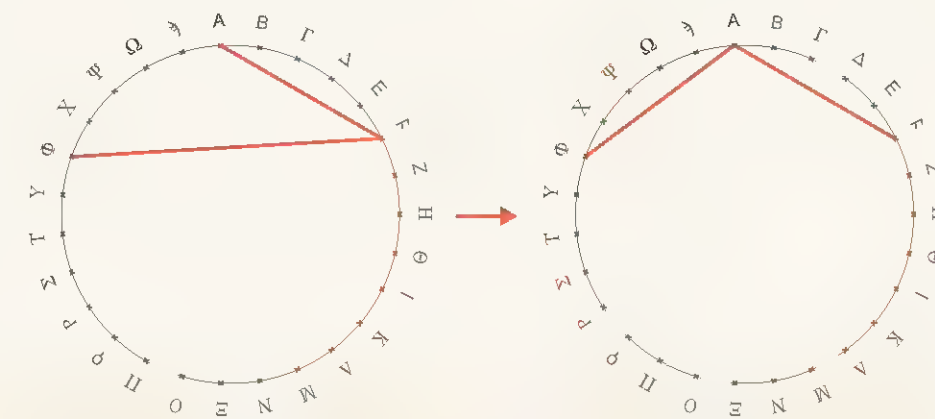
Φ Α Ο Σ



the word of “ LIGHT ” (pháeos)

Ε Φ Α + Φ Ε Α Ο Σ

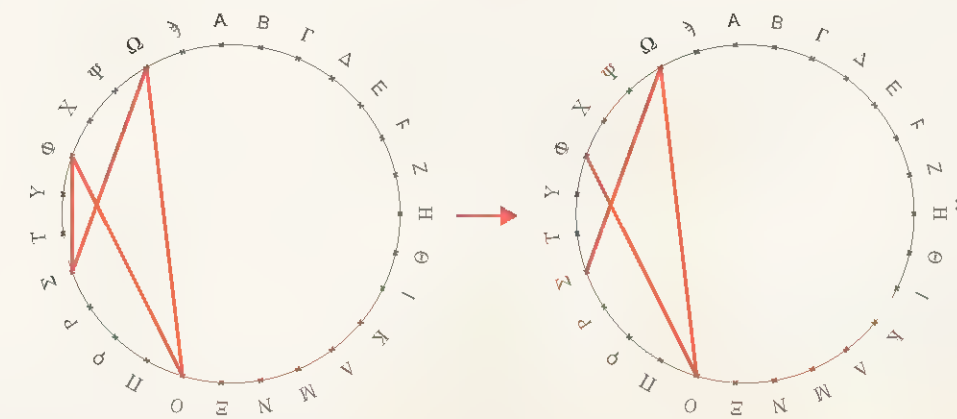
Φ Α Ε Ο Σ



the word of “ LIGHT ” (phóos)

Σ Ω Φ Ω Σ Ο

Φ Ο Ω Σ



† Additionally, the Lucas sequence was observed in the word ΚΑΛΟΣ, but no further investigation was conducted. It is included here because it has a D.R. of 6, corresponding to the digital root of the words for light. ‡

Greek Word 'GOOD' & Lucas Sequence | 27 Letters | Isophephy observation

1 2 3 4 5
Κ Α Λ Ο Σ
20 1 30 70 200

"GOOD"



Digital Root $3+2+1=6$

Position:

Κ Α Λ Ο Σ

Digital Roots:

: **2 1 3 7 2**

Digital Root of 11: $1+1=2$

Lucas numbers: 2, 1, 3, 4, 7, 11, 18, 29, 47, 76, 123, ...

(sequence A000032 in the OEIS)

$$L_n = L_{n-1} + L_{n-2} \quad L_0=2 \quad L_1=1 \quad L_2=3 \quad n=N^*=\{1,2,3, \dots\}$$

Digital Root of 321,123: 6

0 1 2 3 4 5 6 7 8 9 10 11 12

Table of Digital Roots

[illegible]

$$\begin{array}{ccccc} \Sigma & O & \Phi & O & \Sigma \\ 2 & 7 & 5 & 7 & 2 \\ \hline & 9 & & 9 & \\ \hline & & 23 & & \\ & & | & & \\ & & 5 & & \end{array}$$

† ἀβέλιος (ābélios), ἄφελιος (awélios) — Cretan, Laconian
(Hesychius of Alexandria, 1867, p. 4). ἀβέλιον: ἥλιον Κρητες (sun
for the Cretans) ‡

Diagram illustrating the calculation of the word score for "W I S E" using the sum of absolute differences (SAD) method. The diagram shows the alignment of the word "W I S E" with the target word "S O P H O S" and the calculation of the SAD score for each letter. The SAD scores are: W=2, I=7, S=5, E=7. The total SAD score is 23. The word score is calculated as 1040 - 23 = 1017.

⠄	⠠	⠡	⠢	⠣	⠠	⠡	⠢	⠣
1	2	3	4	5	6	7	8	9

I		IIII	
1	0	4	0

$\begin{array}{cccc} - & - & - & + \\ 5 & 1 & 7 & 2 \\ \Phi & A & O & \Sigma \\ 50 & 1 & 70 & 200 \end{array}$
 $\xrightarrow{\hspace{1.5cm}}$
 "L E O H T" (old english)
 771
 15
 6

0	720	1727	2681	3743	5022	6078	7005	7946	9012
1	777	1732	2729	3829	5106	6136	7005	8004	9025
2	819	1811	2792	3887	5182	6201	7027	8094	9114
4	821	1895	2806	3934	5245	6227	7049	8145	9119
7	865	1961	2883	3942	5287	6318	7093	8189	9213
12	911	2014	2974	3997	5295	6338	7159	8284	9215
20	1001	2036	3045	4060	5345	6352	7172	8326	9311
33	1040	2111	3110	4081	5403	6386	7251	8366	9312
54	1072	2111	3149	4165	5414	6434	7343	8448	
88	1143	2186	3156	4173	5483	6516	7417	8473	
143	1149	2261	3202	4265	5563	6549	7486	8483	
232	1226	2314	3255	4268	5615	6567	7532	8518	
279	1309	2345	3257	4363	5650	6618	7550	8563	
318	1372	2429	3312	4364	5737	6687	7614	8643	
404	1421	2447	3369	4460	5762	6710	7696	8671	
432	1452	2452	3384	4460	5777	6802	7745	8682	
449	1436	2475	3456	4556	5817	6820	7779	8721	
494	1500	2503	3543	4652	5872	6833	7862	8771	
556	1579	2554	3605	4747	5967	6864	7882	8860	
566	1625	2633	3657	4841	6020	6908	7888	8902	
638	1653	2666	3674	4933	6071	6983	7914	8936	

Diagram illustrating the process of word formation from a set of letters:

- Initial Letters:** Φ Α Ο Σ (Values: 50, 1, 70, 200)
- Intermediate Stage:** Σ Ο Φ Α (Values: 200, 70, 500, 1)
- Final Stage:** Σ Ο Φ Ο Σ (Values: 200, 70, 50, 70, 200)

The final stage is labeled "WISE" with a total value of 1040.

- - + +
 5 7 4 2
 N O Y Σ
 50 70 400 200
 ----->
 "MIND"
 720
 9

GREEK ALPHABET | CIRCLE | 27 LETTERS

Φ Ω Σ (phôs), Φ Ω Σ (phôôs), Φ Α Ο Σ (pháos)
Φ Α Ξ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 36

OBSERVATIONS

Regarding the words "WISE" (= ΣΟΦΟΣ) & "LIGHT" (= ΦΩΣ)

Observations & Comments | Connotative Levels

Each grapheme as an inviolable abstract pictogram as a visual structure forms a multi-levelled overt taxonomy, meaning that the superordinate grapheme is connected with underlying concepts and/or semantic complement with possibilities of semantic extension

The letter "Σ"
sigma
describes
movement
transmit-
ter receiver
or a path in
plan view



The Greek letter omikron, 'O,'
expresses perfection, wholeness,
and the entirety. Plato, 'Timaeus'
[58a-b] {The perimeter of the
universe having included
within itself the species due to
its circular shape}

Regarding the
accents during
reading, we
typically have
and, inversely,
two grave
accents in
polytonic
writing



« Ana έρως, eros, love, is so named because it
flows in έρπει from without and thus flowing is
not inherent in him who has it but is introduced
through the eyes for this reason it was in ancient
times named έρως from έρπει—for we used to
employ omikron instead of omega—but now it
is named έρως through the change of omikron to
omega. Well, what more is there that you want to
examine? Plato "Cratylus"

The letters of the Greek word of light,
"ΦΩΣ," for someone who ignores the
essence of the word, describe the
life giving force. Based on this
hypothesis, concepts like
photosynthesis or allegorical phrases
that include light could be understood
if they are valid.



Plato, "Timaeus"
[69b] {God creates
with symmetries}

The Greek letter
omega, 'Ω,' resem-
bles a matema-
tical cavity and a develop-
ing embryo
creation, reconstruc-
tion, a structure that
creates produces
begets



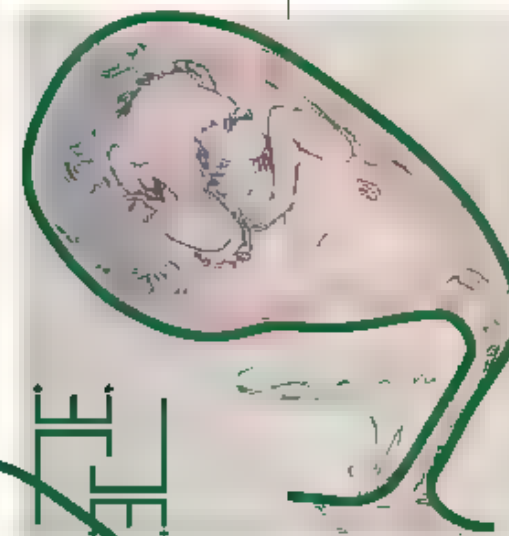
The Greek letter
sigma, 'Σ,' describes
the concept of perpet-
ual motion transmit-
ter receiver, a path
in plan view. It
referenced in the
'Vitruvian Man' by
Leonardo da Vinci, it
passes through the
head (crown), navel,
torso, and feet (base)

Pythagoras did not consider himself wise but a
philosopher. The word philosopher comes from
the Ancient Greek words 'ΦΙΛΟΣ' philos 'love'
and 'ΣΟΦΟΣ' sophos 'wise'. According to him,
only God is wise, and somebody could be only a
'lover of wisdom'.

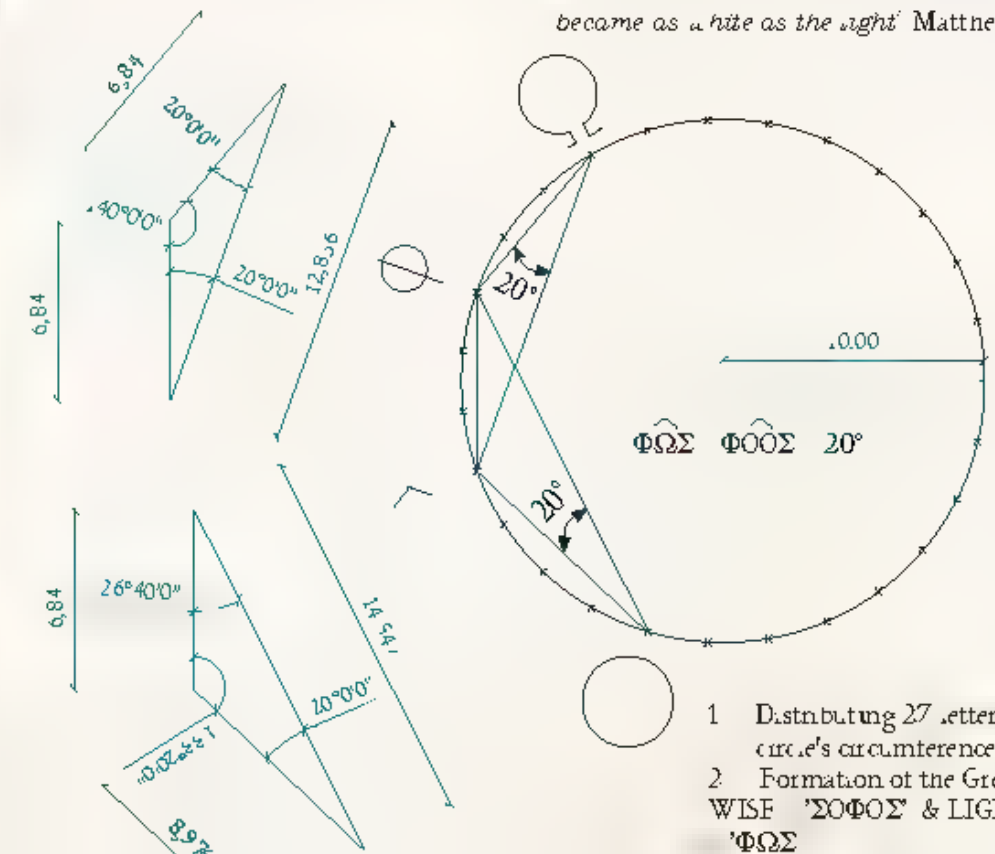
The preamble of Proclus Diadochus' comments
on the 'Timaeus' of Plato informs that 'the
book of Pythagorean Timaeus concerning the
Universe in the manner of the Pythagoreans
attempted to give a Timaeian writing []'. It
also mentions the 'creative triad that receives
the one and total creation of the Father who
receives the Logos []'. So if someone wants
from those who speak of three creators to
banish them to these principles: the creative
mind, the soul, and the whole nature [] One
is the creator of all'.

In the passages of the Old Testament,
'Proemium Psalm 103 [v. 24] 'How manifold
are thy works O LORD in wisdom hast thou
made them all' and 1 John [1:5] 'God is light
and in him is no darkness at all'.

God is revealed as the light above all at the
Transfiguration of Christ on Mount Tabor, when
'His face shone like the sun and His clothes
became as white as the light' Matthew [17:2].



Drawing
Petros Petrakis



1. Distributing 27 letters along the circle's circumference
2. Formation of the Greek words WISE 'ΣΟΦΟΣ' & LIGHT 'ΦΩΣ'

GREEK ALPHABET | CIRCLE | 27 LETTERS

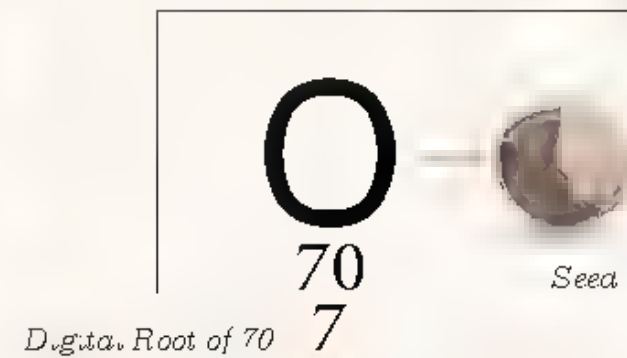
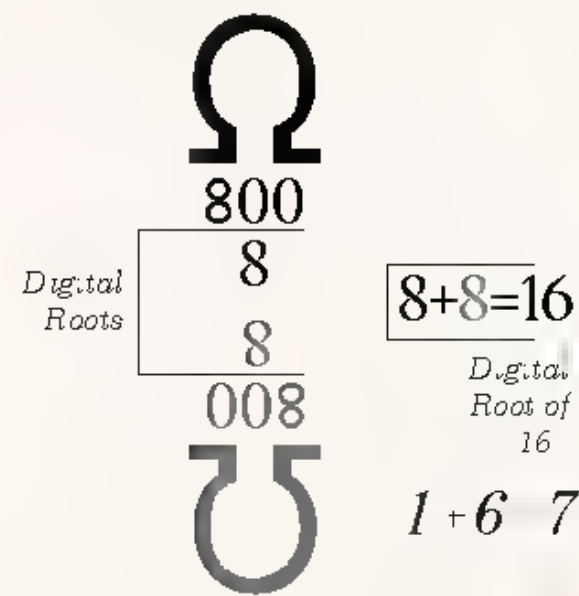
Φ Ω Σ (phôs), Φ Ω Σ (phôds), Φ Α Ο Σ (pháos)
Φ Α Ψ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 37

OBSERVATIONS

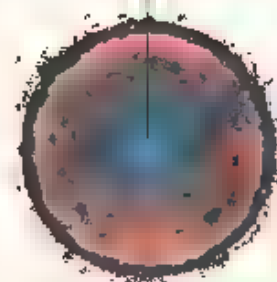
OMEGA
Alphabets
Across Regions
and Dialects

1	N Semitic
2	Arche, Syria
3	Euboea
4	Boeotia
5	Thessaly
6	Phokis
7	Corinth
8	Aegina
9	Megara
10	Attica
11	Boeotia
12	Thessaly
13	Phokis
14	Corinth
15	Aegina
16	Megara
17	Attica
18	Boeotia
19	Thessaly
20	Phokis
21	Corinth
22	Aegina
23	Megara
24	Attica
25	Boeotia
26	Thessaly
27	Phokis

† Letter Omega ΩMEGA Semiotic correlation Peircean Semiotics with the idea of the Maternal Womb and the Principle of Correspondence II) "As above so Below as Below so above [...]" This principle embodies the truth that there is always a correspondence between the laws and phenomena of the various planes of being and life " The Kybalion Subject Hermeticism Occultism ‡



An artist's impression a supernova Credit NASA ESA G. Bacon STScI An artist's impression a supernova (Credit NASA ESA G. Bacon STScI Berkeley Lab and UC Berkeley scientists were part of a team that helped to decipher one of the most bizarre spectacles ever seen in the night sky. A supernova that refused to stop shining, remaining bright for longer than an ordinary stellar explosion.



40 8 300 100 1

"UTERUS, MATRIX" ΜΗΤΡΑ

449

8

Digital root 4+4+9=17 1+7=8

800

"OMEGA" : Ελληνικό γράμμα

8

Digital root of 800 8+0+0=8

Observation The letter "Ω" omega symbolizes a maternal cavity and an embryo during development (creation, reconstruction, a structure that creates, produces, and gives life



"Eta"

"Pi"

"Omega"

Digital root 8

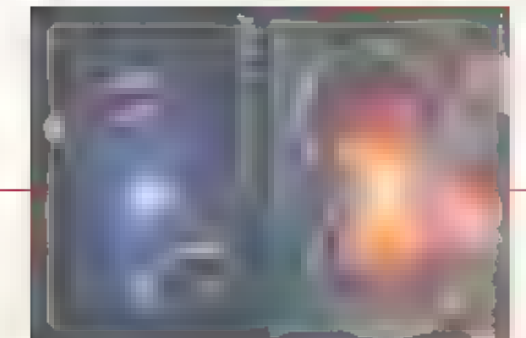
The figure represents an early fertility deity, perhaps a mother goddess, the Venus of Willendorf. Oolite, red ochre Upper Paleolithic period, 25,000 BC Limestone, height 11.1 cm. Natural History Museum, Vienna, Austria

* + 8



GREEK ALPHABETS

8



GREEK ALPHABET | CIRCLE | 27 LETTERS

OBSERVATIONS

Φ Ω Σ (phôs), Φ Ω Σ (phôds), Φ Α Ο Σ (pháos)
Φ Α Ψ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 38

† Aristotle, *On the Soul* Loeb Classical Library DOI 10.4159/DLCL.aristotle-soul.1957

A passage from Aristotle's "On the Soul" is presented. In lines 404b[25-30], after mentioning Plato's Pythagorean position that "the ideas of things are numbers" it is written that "some combine that the soul is a number that moves itself"

404b[16-28] "In the same way in the *Timaeus* Plato constructs the soul out of the elements [] A similar definition is laid down in his comments *About Philosophy* where he maintains that the living universe is derived from the idea of the One and from the primary length breadth and depth and everything else in the same way. But he also gives another account that mind is One and knowledge. This is for there is only one straight line from one point to another and the number of the plane. Three is opinion and the number of the cube. Four is sensation. For numbers are alleged to be identical with the forms themselves and ultimate principles but they are composed of the elements. The sensible world is apprehended in some cases by mind in others by knowledge in others again by opinion and in others by sensation and these numbers are the forms of things."

404a[18-26] "The theory handed down from the Pythagoreans seems to entail the same view for some of them have declared that the soul is identical with the particles in the air and others with that makes these particles move. These particles have found their place in the theory because they can be seen perpetually in motion. "οἱ δὲ τὸ ταῦτα κινεῖν περὶ δὲ τοῦτω εἴρηται διότι σιμῶς παίνεται κινούμενα" even when the air is completely calm. Those who say that the soul is that which moves itself tena tou aras the same view. For they all seem to assume that movement is the distinctive characteristic of the soul and that everything else owes its movement to the soul which they suppose to be self-moving because they see nothing producing movement which does not itself move." ‡

† In Aristotle's expression concerning the Pythagoreans' view of the essence of the soul, after equivalent replacements of letters with numbers, the implicit existence of the words 'ΦΩΣ' light, 'ΦΑΟΣ' light, 'ΦΑΦΟΣ' light, 'ΣΕΛΑΣ' light and the suggestive presence of the number 8771, which is found within the continuous sums of periodic digits of mod97 of Fibonacci numbers, was observed. ‡

† In the archaic word 'ΦΑΦΟΣ' a "silent" numerical connection is observed with the equivalence 777 and the D.R. value of the word ΨΥΧΗ soul, which is 7, as well as the appearance of both 7 and 777 in the continuous sums of positions of periodic digits

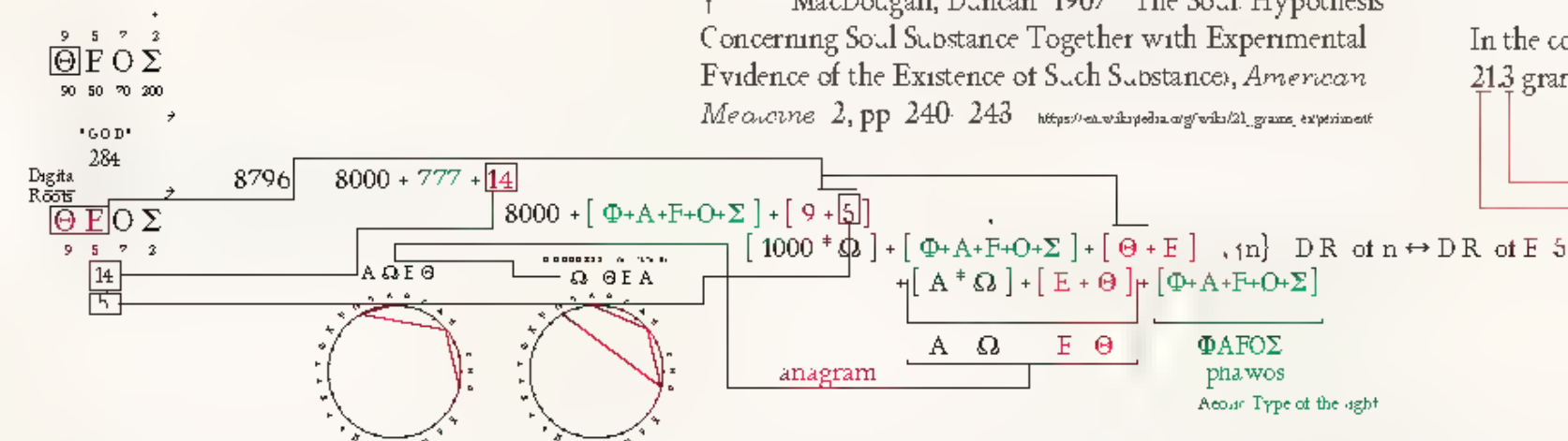
Creating a semiotic relationship x y The 7 is not just the D.R. value of the soul but is explicitly denoted 3 times by the number 777. Finally, the D.R.s 3 & 7 are the multiples of 21, which results from the sum of 7+7+7. ‡

† MacDougall, Duncan 1907 The Soul Hypothesis Concerning Soul Substance Together with Experimental Evidence of the Existence of Such Substance, *American Medicine* 2, pp 240-243 https://en.wikipedia.org/wiki/21_grams_experiment

The 21 grams experiment refers to a study published in 1907 by Duncan MacDougall, a physician from Haverhill, Massachusetts. MacDougall hypothesized that souls have physical weight, and attempted to measure the mass lost by a human when the soul departed the body. MacDougall attempted to measure the mass change of six patients at the moment of death. One of the six subjects lost three-quarters of an ounce 21.3 grams.

The experiment has not been repeated since, and Duncan himself stated that it should be conducted again under absolutely controlled conditions.

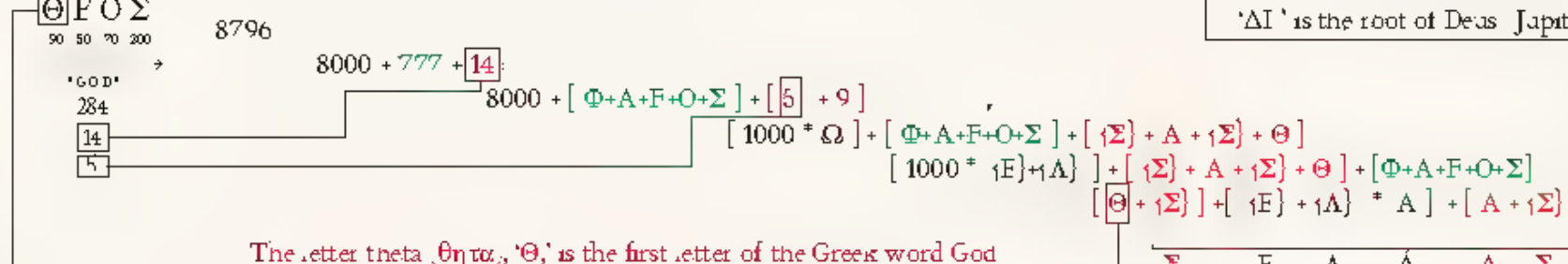
In the context of coincidence, the digits of the numerical value 21.3 grams appear in the D.R.s of the word 'ΦΑΦΟΣ' as 21 & 3. This creates another semiotic relationship of numbers x y coincidentally. ‡



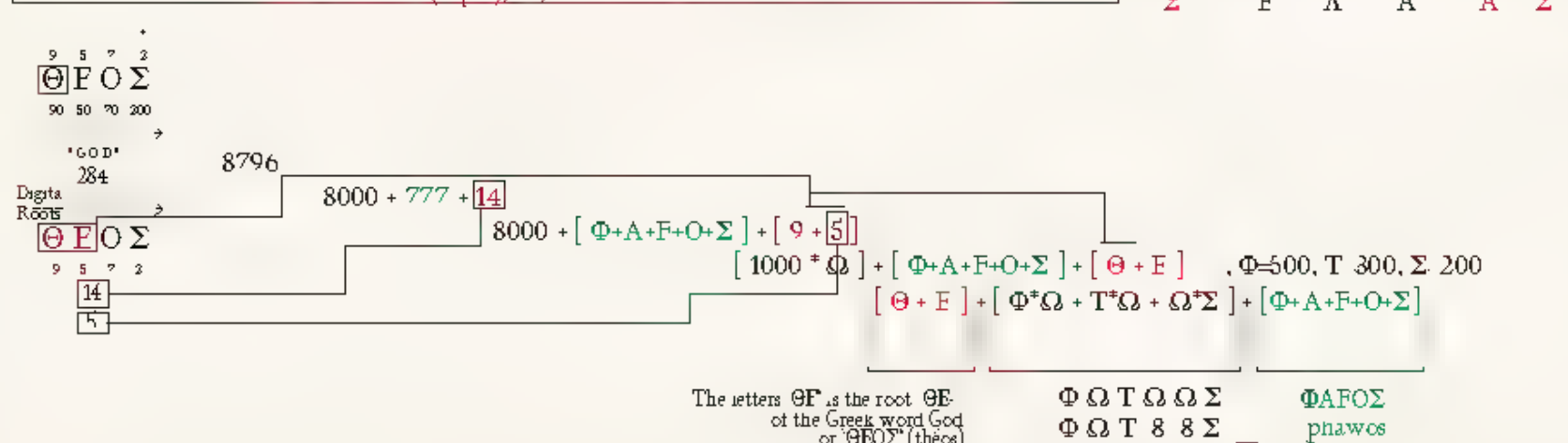
Aristotle, *On the Soul*, 404a[15-20]: According to the Pythagoreans, the soul is described as particles

ΟΙ ΔΕ ΤΟ ΤΑΥΤΑ ΚΙΝΟΥΝ ΠΕΡΙ ΔΕ ΤΟΥΤΩΝ ΕΙΡΗΤΑΙ ΔΙΟΤΙ ΣΥΝΕΧΩΣ ΦΑΙΝΕΤΑΙ ΚΙΝΟΥΜΕΝΑ

70 100 4 5 300 70 300 1 400 300 1 20 100 50 70 400 50 80 5 100 1 0 4 5 300 70 400 300 800 50 5 10 100 8 300 1 0 4 10 70 300 1 0 200 400 50 5 600 800 200 50 1 10 80 5 300 1 0 20 10 50 70 400 40 5 50 1



The letter theta, Θητα, 'Θ', is the first letter of the Greek word God



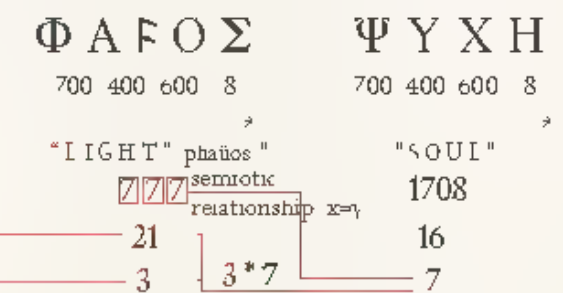
The letters ΘΦ is the root ΘΕ of the Greek word God or ΘΕΟΣ (theos)

Φ Ω Τ Ω Ω Σ
Φ Ω Τ 8 8 Σ

ΦΑΦΟΣ
phawos
Acoustic Type of the light

Via geometric operations the external curve is the circle. The circle connotes the Greek letter omicron, 0.

It is produced the following word
• Φ Ω Τ Ο Σ
roi' πορωτος' genitive case of the word ΦΩΣ"



ΦΑΦΟΣ
700 400 600 8
"LIGHT" phawos
semiotic relationship x=y
21 3 3*7
1708 16 7

Acoustic Type of the light
phawos
ΦΑΦΟΣ
, {n} D.R. of n ↔ D.R. of Σ 2
, {n} D.R. of n ↔ D.R. of Ε 5 & Α 3
, Α 1000 (Ithak 2000-220) 8796, ~8771
Σ Ε Λ Α Σ se las, light, brightness, flame
se las, σε λ ας, αος, το; Horn uses besides nom II 17 739
LIDDELL & SCOTT

Sequential Summations of Periodic Digits Positions

0	720	1727	2681	3743	5022	6078	7005	7946	9012
1	777	1732	2729	3829	5106	6136	7005	8004	9026
2	819	1811	2792	3887	5182	6201	7027	8094	9114
4	821	1895	2806	3934	5245	6227	7049	8145	9119
7	866	1961	2883	3942	5287	6318	7093	8189	9213
12	911	2014	2974	3997	5296	6338	7159	8284	9215
20	1001	2036	3045	4060	5345	6352	7172	8326	9311
33	1040	2111	3110	4081	5403	6386	7251	8366	9312
54	1072	2111	3149	4166	5414	6434	7343	8448	
88	1143	2186	3156	4173	5483	6516	7417	8473	
143	1149	2261	3202	4266	5563	6649	7486	8483	
232	1226	2314	3255	4268	5615	6667	7532	8518	
279	1309	2345	3257	4363	5650	6618	7550	8563	
318	1372	2429	3312	4364	5737	6687	7614	8643	
404	1421	2447	3369	4460	5762	6710	7696	8671	
432	1436	2452	3384	4460	5777	6802	7745	8682	
449	1475	2475	3456	4556	5817	6820	7779	8721	
494	1500	2503	3543	4652	5872	6833	7862	8771	
556	1579	2554	3605	4747	5967	6864	7882	8860	
566	1625	2633	3657	4841	6020	6908	7888	8902	
638	1663	2666	3674	4933	6071	6983	7914	8936	

GREEK ALPHABET | CIRCLE | 27 LETTERS

OBSERVATIONS

Φ Ω Σ (phôs), Φ Ω Σ (phôôs), Φ Α Ο Σ (pháos)
Φ Α Ξ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 39

† The soul is associated with the fundamental element of fire, which can indirectly be related to light since fire is inherently a light source. This association appears coincidentally and implicitly in their geometric and numerical forms.

405a[5-10]: «ὅθεν ἔδοξέ τισι πῦρ (=ΠΥΡ=PYR) εἶναι· καὶ γὰρ τοῦτο λεπτομερέστατόν τε καὶ μάλιστα τῶν στοιχείων ἀσώματον, ἔτι δὲ κινεῖται τε καὶ κινεῖ τὰ ἄλλα πρώτως.»

Translation: "And so some have thought the soul to be fire; for this is composed of the finest particles, and of all the elements is the nearest to incorporeal, and it also in a primary sense moves and causes movement in other things."

405b[17-20] ὅσοι μὲν οὖν μίαν τινὰ λέγουσιν αἰτίαν καὶ στοιχεῖον ἓν, καὶ τὴν ψυχὴν ἓν τιθέασιν, οἷον πῦρ ἢ ἀέρα· οἱ δὲ πλείους λέγοντες τὰς ἀρχὰς καὶ τὴν ψυχὴν πλείω ποιοῦσιν.

Translation: "Those, then, who allege that there is only one cause, and but one element, also make the soul one element, such as fire or air; but those who believe in more than one first principle make the soul also plural."

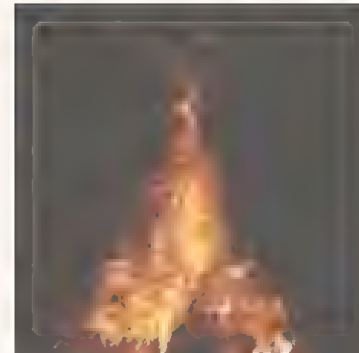
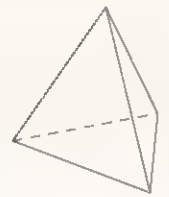
404a[1-4]: «ὅθεν Δημόκριτος (460-370π.Χ.) μὲν πῦρ τι καὶ θερμόν φησιν αὐτὴν εἶναι· ἀπείρων γὰρ ὄντων σχημάτων καὶ ἀτόμων τὰ σφαιροειδῆ πῦρ καὶ ψυχὴν λέγει (οἷον ἐν τῷ ἀέρι τὰ καλούμενα ξύσματα, ἃ φαίνεται ἐν ταῖς διὰ τῶν θυρίδων ἀκτῖσιν), τού- των δὲ τὰ σφαιροειδῆ ψυχὴν»

Translation: "On this supposition Democritus argues that the soul is a sort of fire or heat. For forms and atoms being countless, he calls the spherical ones fire and soul." ‡

† Firewalking in Ancient Greece: "At Castabala is the temple of the Perasian Artemis, where the priestesses, it is said, walk with naked feet over hot embers without pain" Strabo, «Geography.» 12, 2, 7 ‡

† In Plato's "Timaeus," as a Pythagorean, he signifies «FIRE» (=ΠΥΡ) with the tetrahedron, i.e., a pyramid-like geometric structure. ‡

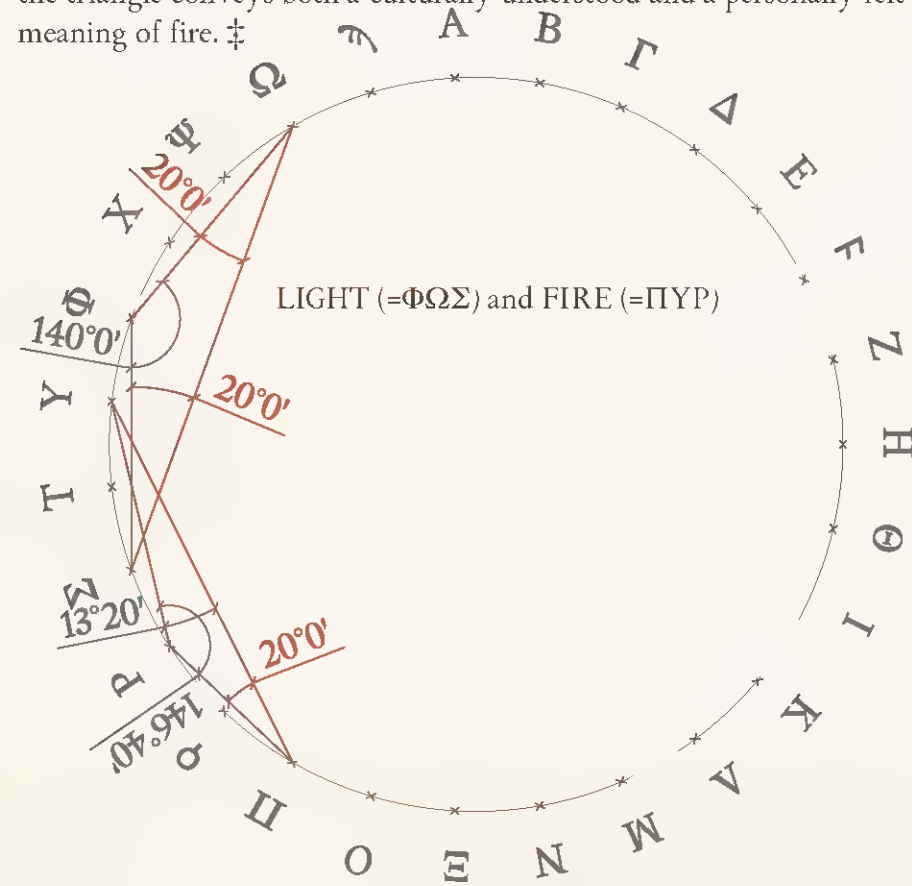
Tetrahedron
{3, 3} in view
(top figure),
perspective
(middle fig.),
and
development
(bottom fig.).
Platonic solid
- Fire (=ΠΥΡ),
"Timaeus"
56[a-c]



Firewalking in Athens.
Depicted Firewalker:
Petros Petrakis



† Pythagorean philosophy identifies FIRE (=ΠΥΡ) semiotically with the triangle; schematically, it appears to be the abstract representation of a fire's hearth. As a second reading level with a geometric approach, the triangle has an obvious connotation of fire. The shape of a triangle often symbolizes fire due to its sharp, pointed nature, which mirrors fire's dynamic and transformative properties, aligning with Roland Barthes' concept of studium and punctum, where the triangle conveys both a culturally understood and a personally felt meaning of fire. ‡



† Observations on the circle with the words FIRE (=ΠΥΡ) and LIGHT (=ΦΩΣ): Associatively, they arise through a sequence of existence. Additionally, it is observed that as geometric images (which I call geo-lexical identities), they appear as implicit connective windows for each other through the equivalence of the 20° angles of the isosceles triangle LIGHT (=ΦΩΣ) and the scalene triangle FIRE (=ΠΥΡ). The other two angles of the scalene triangle differ only by 6°40' and 6°20'. ‡

† To justify the reduction of letters to a circle, one can refer to the following passage from Aristotle and then make the following simple reasoning:

The alphabetic letters have a finite number, a beginning, and an end. Each new repetition expresses a peripheral movement, represented by a circle.

Aristotle, *On the Soul*: 407a[15-30]: «εἰ δ' ἀναγκαῖον νοῆσαι τῷ ὅλῳ κύκλῳ θιγόντα, τίς ἐστὶν ἡ τοῖς μορίοις θίξις; ἔτι δὲ πῶς νοήσει τὸ μεριστὸν ἀμερεῖ ἢ τὸ ἀμερὲς μεριστῶ; ἀναγκαῖον δὲ τὸν νοῦν εἶναι τὸν κύκλον τοῦτον· νοῦ μὲν γὰρ κίνησις νόησις κύκλου δὲ περιφορά· εἰ οὖν ἡ νόησις περιφορά, καὶ νοῦς ἂν εἴη ὁ κύκλος οὗ ἡ τοιαύτη περιφορά νόησις, αἰεὶ δὲ δὴ τί νοήσει (δεῖ γάρ, εἴπερ ἀίδιος ἡ περιφορά); [...] ἡ δὲ περιφορά πάλιν ἐπ' ἀρχὴν ἀνακάμπτει.»

Translation: «But if it can only think when its whole circle is in contact, what does the contact of its parts mean? (3) Again, how can it think that which has parts with that which has not, or that which has not with that which has? The mind must be identical with this circle; for the movement of the mind is thinking, and the movement of a circle is revolution. If then thinking is revolution, then the circle whose revolution is of this kind must be mind. But what can it be which mind always thinks? —as it must if the revolution is eternal. » ‡

† The geometric image of the words «FIRE» (=ΠΥΡ) and «LIGHT» (=ΦΩΣ) is a triangle.

The total sum of the internal angles of the triangle is 180°. ‡

† The speed of light in meters per second is 299,792,458 (m/s)

The conversion of the speed of light from meters per second to miles per second is given by the formula:

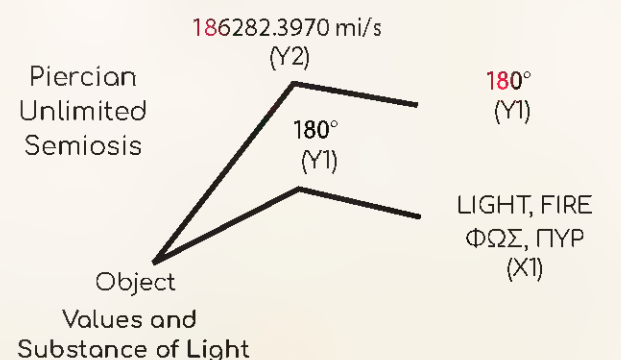
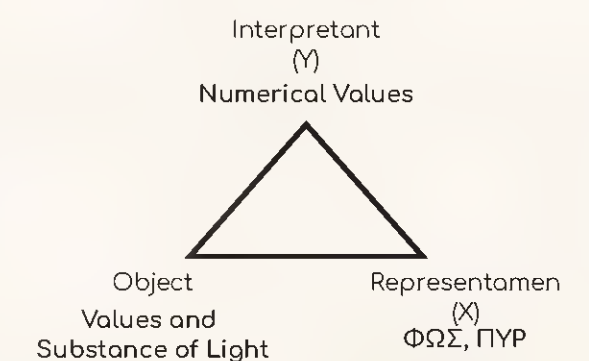
$$\text{mi/s} \times 1,609,344 = \text{m/s}$$

Therefore, the speed in miles per second is

186282.3970512208701185079137835043346854370476417
72 (mi/s) ‡

† The coincidental matching of the first two numerical digits of the triangle's 180° and the 186282.3970 mi/s.

The two different quantities can be used in a semiotic relationship (x=y) to organize a "silent" implication within the framework of the word circle's reduction, provided the name-giver knows the conventional speed of light, using the semiotic model of Charles Sanders Peirce, as was done earlier for Hermes Trismegistus. ‡



GREEK ALPHABET | CIRCLE | 27 LETTERS

OBSERVATIONS

Φ Ω Σ (phôs), Φ Ω Σ (phôôs), Φ Α Ο Σ (pháos)
Φ Α Ξ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 40

† Etymology of the word pyramid: Pȳr + Hamis Πῦρ + ἄμις Ἀεξικὸ Lidell & Scott

<https://www.perseus.tufts.edu/bopper/text?doc=PerseusText:1999.04.0067&entry=pyramid/s>

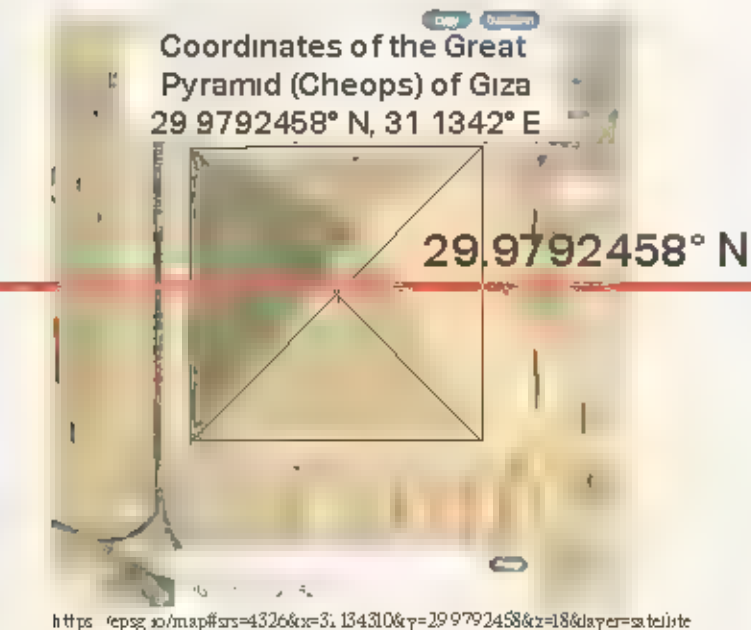
A pyramid, Hdt. 2.8, 124, D.S. 1.63, Str. 17.1.33, OGI 666.13 Egypt, 1 A.D., etc.; as a sepulchral monument, P.Laps. 30.14 1st A.D.,

2 pyramid, as a geometrical figure, Pl. Ti. 56b, Arist. Cael. 304a12, etc.

b. pyramidal number, Speus. ap.

Theol. Ar. 62

"Some derive the word pyramid from fire because of its pointed shape like a flame" Ammian. Marcell. 22. cf. Plat. "Others derive it from fire suggesting that the pyramids were grain storage facilities" Steph. B. "but probably the name and the thing are Egyptian." The apex of Great Pyramid of Giza is very close to the geographic latitude of 29.9792458° N, according to the Coordinate system WGS 84 EPSG:4326. The apex tends towards 29.9792458, which semiotically corresponds to the speed of light.



† Dicks, D.R. 1953 *Hipparchus: a critical edition of the extant material for his life and works* [PhD] Birkbeck College, University of London.

Hipparchus 2nd century BC used a coordinate system that adopted a spherical Earth and divided it into 360°, as we still do today. However, no reference to latitude has been found in Egyptian literature.

Circularity of a Semiotician Code

Globe with Latitudes and Europe Centered



Barthes, R. 1977 *Elements of Semiology* p. 22 1st ed. Translated by A. Lavers and C. Smith New York: Hill and Wang

Theory of Semiotics

denotation = connotation
 $x = y$

$x = 299\,792\,458$ m/s (speed of light),
 $y = 29.9792458^\circ$ N

$x=y: 299\,792\,458$ m/s = 29.9792458° N

Theory of Semiotics

denotation = connotation
 $x = y$

$x = 186\,282.397$ mi/s (speed of light),
 $y = 180^\circ = \Phi\Omega\Sigma + \Sigma\Phi\Omega + \Phi\Sigma\Omega$

$x=y: 186\,282.397$ m/s = 180°

† The geometric image of the Greek words ΠΥΡ fire and ΦΩΣ light is a triangle.

The total sum of the internal angles of the triangle is 180°.

Tetrahedron
{3/3} in view
top figure
perspective
middle fig.
and
development
bottom fig.
Platonic solid
Fire ΠΥΡ
Timaeus
56[a-c]



† The latitude line passes almost through the center of the pyramid. A fire brazier with a few pieces of wood also forms a pyramidal shape, emitting light. In Timaeus, Plato associates the four-sided pyramidal shape with fire. The latitude line, since it tends toward the center, a connotative reference to the speed of light is found, as it tends toward the pyramid's center. In ancient times, gold was placed at its peak. Both the peak, as a connotation of fire, and the sacred material relatively associated with light imply the pyramid's peak as a light transmitter. Simultaneously, the triangle itself, both as a shape and as a symbol, serves as a reminder of the speed of light, encoded through the first two digits of the sum of its internal angles 180°. 1 and 8. ‡

GREEK ALPHABET | CIRCLE | 27 LETTERS | $\Phi \Omega \Sigma$ (phôs), $\Phi \Omega \Omega \Sigma$ (phôōs), $\Phi \Lambda \Omega \Sigma$ (pháos) $\Phi \Lambda \Gamma \Omega \Sigma$ (phawos), $\Phi \Lambda \epsilon \Omega \Sigma$ (pháeos) 41

OBSERVATIONS

† In parallel with the classical era, during which there existed a communication channel between Athens and Egypt, the following observations about the Parthenon are noteworthy:

(1) p. 70 Pennick, Nigel (1980). *Sacred Geometry Symbolism and Purpose in Religious Structures*. Wellingborough, Northamptonshire: TURNSTONE PRESS LIMITED. | King Fahd University of Petroleum & Minerals. Dhahran. 31261. Saudi Arabia.

http://library.kfupm.edu.sa/iii/encore/record/C_Rb1012508__Ssacred%20geometry__Orightresult__U_X7?lang=eng&suite=def

“The geometry of the Parthenon was such that it incorporated significant measures. Its dimensions were meticulously recorded by an English architect, Francis Cranmer Penrose, who measured the temple with a precision to one thousandth of an English foot. Penrose determined that the Parthenon was not laid out with straight lines, but instead utilized subtle mathematical curves in its fabric. Thus the Parthenon represents another order of geometry, something quite out of the ordinary. Penrose determined that there are essential similarities between the geometrical structure of the Parthenon and the Great Pyramid. The elevations of the fronts of the Parthenon were determined by the Golden Section and the sides were based upon the factor π . Professor Stecchini has calculated that the slight deviations found in the bases of both the Parthenon and the Great Pyramid were deliberate and not the result of slight miscalculations. In his view, the Φ to π relationship of end to side in the Parthenon parallels that of the north face of the Pyramid (Φ) to the west face (π).

The width of the fronts of the Parthenon were such as to indicate a second of a degree at the equator. Thus, the individual parts of the fabric, all proportioned commensurably with the underlying geometry of the whole edifice, were in turn proportioned with regard to the dimensions of the Earth itself. The divine harmony thus engendered integrates the building with the cosmos. It becomes an integral part of the overall harmony of the world and is thus a perfect vessel for worship. The threefold necessities for a functional temple — orientation, geometry and measure — are found in the Parthenon and every other truly sacred building planted on the Earth.

This degree of integration is attainable by no other method.”

(2) https://www.researchgate.net/publication/318020251_On_the_Parthenon's_Mathematics_Astronomy_and_its_Embedded_Harmony

“The Astronomy built into the Parthenon’s design is depicted by the red line drawn in Figures 1, 2 and 3. Line AC, which joins the centers of columns #1 and #24, is a key feature in the design of the Parthenon. It is quite close to a 62° azimuth — very close to the azimuth of the Summer Solstice sunrise at the Athens’ location. The Parthenon is located at Earth’s latitude of about 38° (to be exact at 37.9714°N). At that latitude, the sunrise at Summer Solstice occurs at about a 60° azimuth angle or 30° North of the due East-West orientation. The AC axis has an angle (as it will be shown below, this being one of the three core angles of the Parthenon’s skeletal structure) of about 22.3° to the Parthenon’s axis of symmetry EF, Figure 1. Given that the inclination of the EF axis is about 10°, see Figure 3, it follows that the AC diagonal axis points to the Summer sunrise rays at Solstice.

The one or two degrees of possible difference is negligible. Given the uncertainty surrounding the change in the declination of the ecliptic (as the Earth’s axis of rotation traces an approximately 26K-year cycle) over the intervening 25 centuries; and in view of any other competing and compelling rationale for such a deviation from a pure and due East-West orientation of the Parthenon’s main symmetry axis; it can be asserted with some degree of confidence that the objective of the Parthenon’s architects Callicratis and Ictinos in sketching out the blueprint of the Parthenon was to align this key diagonal of the Temple dedicated to goddess Athena to the sunrise during Summer Solstice on the one end, and to the sunset during Winter Solstice on the other end. It could be an orientation that the prior to Parthenon Temple had.

Of course, the orientation of the key diagonal line AC leaves one wondering what was the function (or intent) of the other diagonal’s orientation. Parthenon’s EF main axis of symmetry (at about 10° North of the due East-West orientation) is understood now (as it will be demonstrated in more detail in a bit) to have been decided in the pursue (and the result) of a desired AC orientation. This reason still leaves as an open question the other diagonal’s orientation.” †

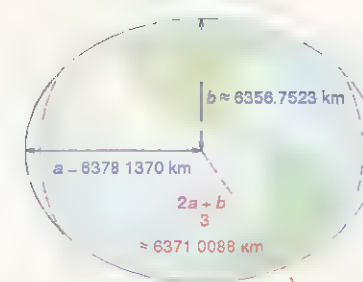
† <<https://en.wikipedia.org/wiki/Latitude>>
Coordinate Systems Worldwide <<https://epsg.io/map#srs=4326&x=23.726671&y=37.971533&z=20&layer=satellite>> (WGS 84 EPSG:4326: The New World Geodetic System) *The World Geodetic System (WGS) is a standard used in cartography, geodesy, and satellite navigation including GPS. The current version, WGS 84, defines an Earth-centered, Earth-fixed coordinate system and a geodetic datum, and also describes the associated Earth Gravitational Model (EGM) and World Magnetic Model (WMM).* (wikipedia)

One of the most fascinating scientific observations, a paradox in the wavelength of the Great Pyramid, is related to the Earth and the precise placement of the Parthenon upon it:

The geographic coordinates of the Parthenon are:

※ 37.971533°N 23.726671°E ή
※ 37°58'17.519"N 23°43'36.016"E

Therefore, the geographic latitude is 37.971533°N. It is noted that the geographic longitude could potentially change in the future, while the geographic latitude always remains stable, as it is directly related to the "ellipsoidal" shape of the Earth (oblate ellipsoid of



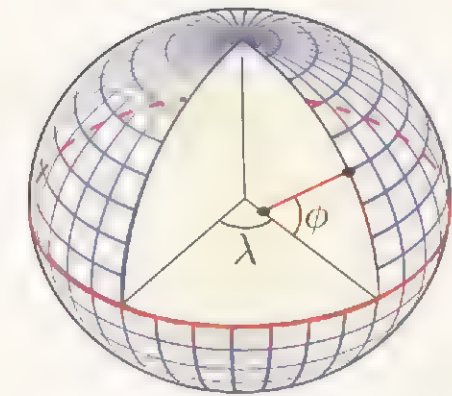
revolution).

"In geography, latitude is a coordinate that specifies the north-south position of a point on the surface of the Earth or another celestial body. Latitude is given as an angle that ranges from 90° at the south pole to 90° at the north pole, with 0° at the Equator.

In 1687, Isaac Newton, in his work *Philosophiæ Naturalis Principia Mathematica*, proved that a rotating self-gravitating fluid body in equilibrium takes the form of an oblate ellipsoid (such as the Earth). In the 18th century A.D., Newton's result was confirmed by geodetic measurements.

The plane of the Earth's orbit about the Sun is

called the ecliptic, and the plane perpendicular to the rotation axis of the Earth is the equatorial plane. The angle between the ecliptic and the equatorial



"A perspective view of the Earth showing how latitude (ϕ) and longitude (λ) are defined on a spherical model. The graticule (map grid) spacing is 10 degrees (distance between the arcs)."

plane is called variously the axial tilt, the obliquity, or the inclination of the ecliptic, and it is conventionally denoted by i .

The figure shows the geometry of a cross-section of the plane perpendicular to the ecliptic and through

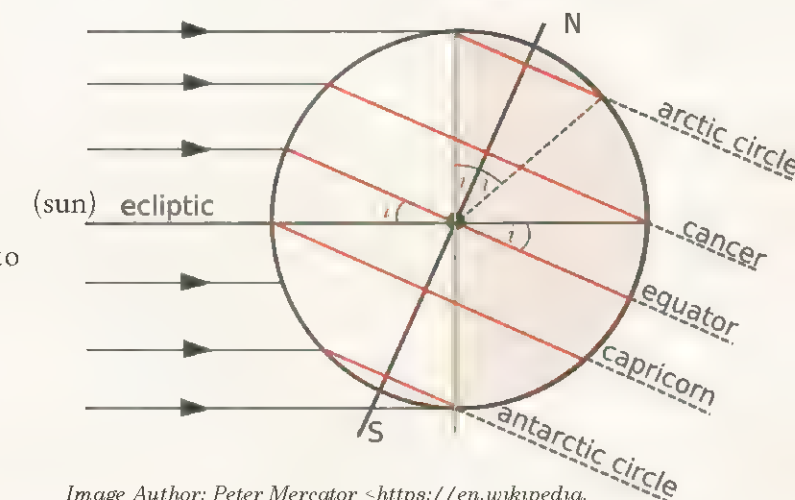


Image Author: Peter Mercator <https://en.wikipedia.org/wiki/File:December_solstice_geometry.svg>

Arctic Circle	66° 34' (66.57°) N
Tropic of Cancer	23° 26' (23.43°) N
Tropic of Capricorn	23° 26' (23.43°) S
Antarctic Circle	66° 34' (66.57°) S

the centres of the Earth and the Sun at the December solstice when the Sun is overhead at some point of the Tropic of Capricorn. The south polar latitudes below the Antarctic Circle are in daylight, whilst the north polar latitudes above the Arctic Circle are in night. The situation is reversed at the June solstice, when the Sun is overhead at the Tropic of Cancer. Only at latitudes in between the two tropics is it possible for the Sun to be directly overhead (at the zenith).

Geodetic latitude: the angle between the normal and the equatorial plane. The standard notation in English

GREEK ALPHABET | CIRCLE | 27 LETTERS

OBSERVATIONS

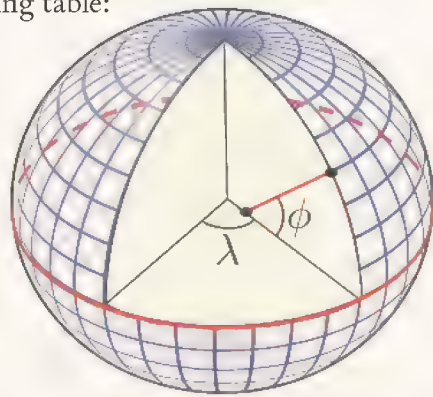
Φ Ω Σ (phōs), ΦΟΩΣ (phóōs), Φ Α Ο Σ (pháos)
Φ Α Ψ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 42

publications is ϕ . This is the definition assumed when the word latitude is used without qualification. The definition must be accompanied with a specification of the ellipsoid. "Latitude" (unqualified) should normally refer to the geodetic latitude. The Equator has a latitude of 0° , the North Pole has a latitude of 90° North (written 90° N or $+90^\circ$), and the South Pole has a latitude of 90° South (written 90° S or -90°). The latitude of an arbitrary point is the angle between the equatorial plane and the normal to the surface at that point: the normal to the surface of the sphere is along the radial vector.

Due to differences in the specifications of "ellipsoidal" shapes, there are various types of geodetic system names, such as WGS84: 'The New World Geodetic System,' which is the reference system used by the Global Positioning System. In summary, in the early 1980s, the geodetic community and the U.S. Department of Defense recognized the need for a new global geodetic system, which led to the development of WGS 84, which became the reference system for GPS with significant aid from satellite laser ranging, offering geocentric and globally stable accuracy within 1 meter.

According to WGS84, the distance of 1° is variable for the Earth's geographic latitude. The lengths of the arcs (geographic latitudes) of the Earth's "ellipsoidal" shape are noted in the following table:

ϕ	$\Delta_{\text{latitude}}^1$	$\Delta_{\text{longitude}}^1$
0°	110.574 km	111.320 km
15°	110.649 km	107.550 km
30°	110.852 km	96.486 km
45°	111.132 km	78.847 km
60°	111.412 km	55.800 km
75°	111.618 km	28.902 km
90°	111.694 km	0.000 km



To calculate the length of the arc where the Parthenon is located, we work as follows:

The angle $\phi = 37.9715^\circ$ N of the geographic latitude of the Parthenon is between the angles 30° and 45° , and the length of the arc will be derived from finding the intermediate value (linear interpolation):

$$y = \frac{y_0(x_1 - x) + y_1(x - x_0)}{x_1 - x_0}$$

$$x_0 = 30^\circ \quad y_0 = 110.852 \text{ km}$$

$$x_1 = 45^\circ \quad y_1 = 111.132 \text{ km}$$

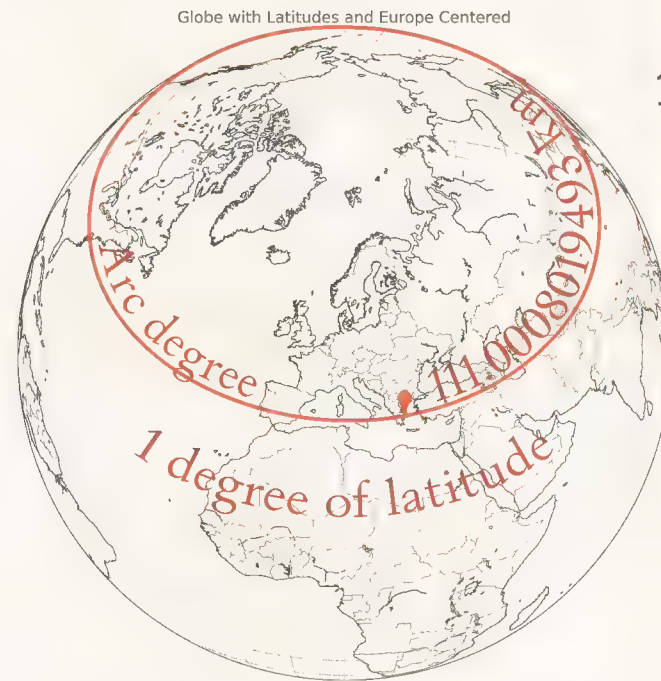
$$x = 37.971533^\circ \quad y = ;$$

$$y = \frac{110.852 \text{ km} \times (45^\circ - 37.971533^\circ) + 111.132 \text{ km} \times (37.971533^\circ - 30^\circ)}{(45^\circ - 30^\circ)}$$

$$y = 111.000801949333 \text{ km}$$

Upon further investigation, it is valid that:

The length of an arc of 1° geographic latitude corresponds to 111.000801949333 km.



An arc of $1'$ (minute) of geographic latitude, which is $1/60$ of a degree, corresponds to

$$111.000801949333 / 60 = 1.85001336582222 \text{ km.}$$

An arc of $1''$ (second) of geographic latitude, which is $1/60$ of a minute, corresponds to $1.85001336582222 / 60 = 0.030833556097037 \text{ km}$ or approximately 30.83 m.

The arc length of 30.83 m describes small segments of the geographic latitude where the Parthenon is located and corresponds to the arc length of 111.00080194934 km of 1° .

According to the book 'Lessons in History of Architecture' ("Μαθήματα Ιστορία της Αρχιτεκτονικής") (p. 240) by the late Professor, Architect Engineer, and Restorer of the Parthenon, Ch.T. Bouras (Athens: Symmetria, 1999), "the general dimensions of the Parthenon at the stylobate level are: 30.86m x 69.51 m"

From a semiotic perspective, the dimension of the narrow side, 30.86 m, almost coincides with the arc length of $1'$ geographic latitude, which corresponds to 30.83 m, with a minimal deviation of 3 cm. The latitude distance (arc degree) intersects both narrow sides of the Parthenon. ‡

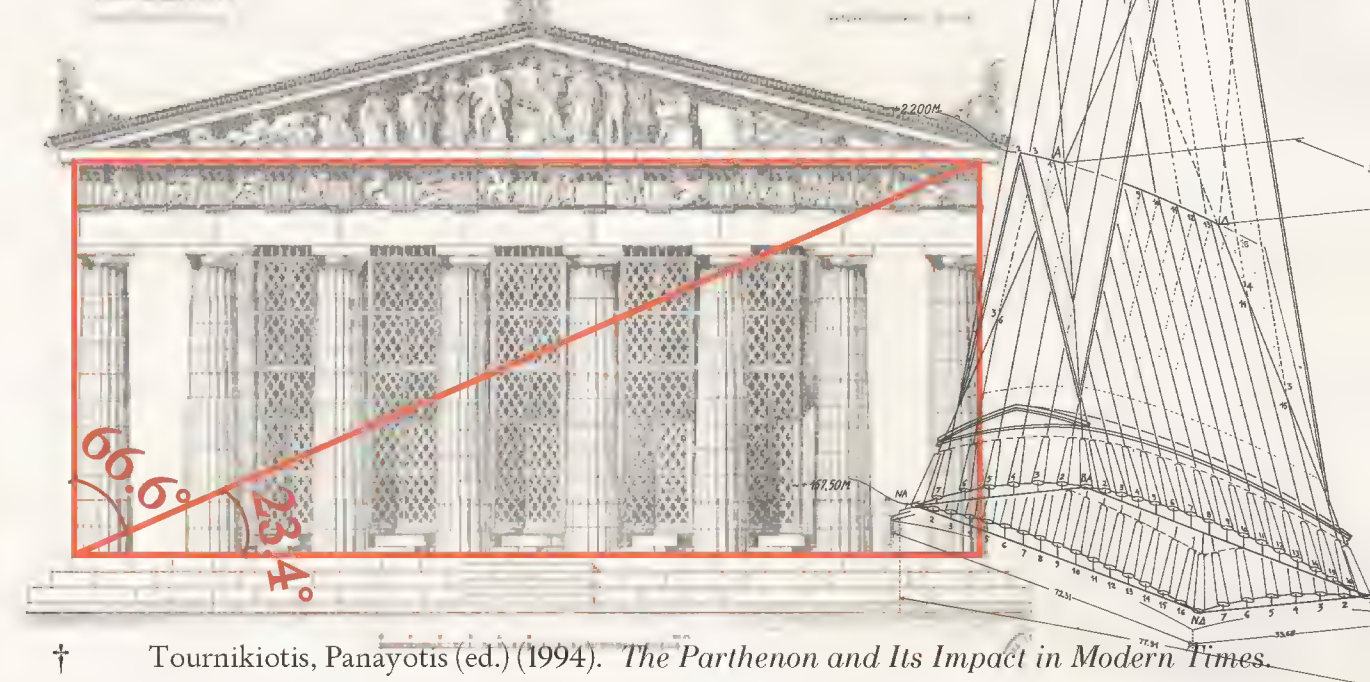
Image: <https://epsg.io/map#srs=4326&x=23.726671&y=37.971533&z=20&layer=satellite>



111.00080194 km degree of latitude

† Ορλάνδος (Orlandos), A.X. (1977). *Η αρχιτεκτονική του Παρθενώνος* (The architecture of the Parthenon). Β'. Βιβλιοθήκη της εν Αθήναις Αρχαιολογικής Εταιρείας Αριθ. 86 (Library of the Athens Archaeological Society No. 86). Page 349: List of Tables: XIV The eastern side of the temple)

In line with the above, the angle of 23.4° formed by the narrow side of the Parthenon nearly coincides with the angle of 23.43° N of the Tropic of Capricorn and Cancer with the ecliptic plane of the sun. Additionally, the digits of the angle 66.6° perfectly align (i.e., coincide) with the D.R.s of light and the speed of light. ‡. ‡



† Tournikiotis, Panayotis (ed.) (1994). *The Parthenon and Its Impact in Modern Times*.

Athens: Melissa (p. 67, 13, the curvature of the horizontal lines and the inward inclination of the external columns of the Parthenon, graphical representation in relief. Drawing: M. Korres).

Kress, G, & Van Leeuwen, T. (2006). *Reading Images: The Grammar of Visual Design*. 2nd edn. London: Routledge (Original work published 1996). (pp. 161-162)

The pyramidal shape of the optical refinements constitutes an implicit pyramidal construction and conceptually fits into the tetrahedral Platonic solid of fire as a reminder of the silhouette of the solid (lowest optical modality, (Kress & Van Leeuwen, 2010/1996: 161-162). On the next page, some observations connecting with the words of light follow. ‡

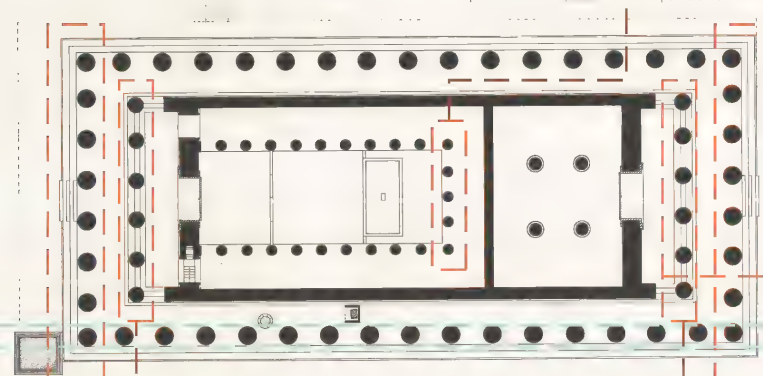
GREEK ALPHABET | CIRCLE | 27 LETTERS |

OBSERVATIONS

Φ Ω Σ (phôs), Φ Ω Σ (phôôs), Φ Α Ο Σ (pháos)
Φ Α Ψ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 43

† The Parthenon is an octastyle peripteral temple with a hexastyle amphiprostyle cella, meaning it is surrounded by 8 columns on the narrow side and 17 on the long side, while the narrow side of the cella has 6 columns. The cella is the temple's central enclosed space (the inner area), divided into two unequal parts. ‡

Image: <https://www.ysma.gr/μνημεία/παρθενόνας/>



The alphanumeric value of the nominative case is:

ΠΑΡΘΕΝΩΝ
80 1 100 9 5 50 800 50

"PARTHENON"

1095

ΠΑΡΘΕΝΩΝ
8 1 1 9 5 5 8 5

8+1+1+9+5+5+8+5

42

4+2

6

Digital Root

The alphanumeric value of the GREEK vocative case is:

Ω ΠΑΡΘΕΝΩΝ
800 80 1 100 9 5 50 800 50

"O PARTHENON"

1895

Ω ΠΑΡΘΕΝΩΝ
8 1 1 9 5 5 8 5

8+8+1+1+9+5+5+8+5

50

5+0

5

Digital Root

Root of "LIGHT"
(phôs) (Attic type)

Aeolic and Epic Type
1 2 3 4
Φ Α Ο Σ

500 1 70 200

"LIGHT" (pháos)

771

Φ Α Ο Σ

5 1 7 2

7+7+1

15

1+5

6

Digital Root

External number of columns:
8+8+15+15+6+6=

58

5 8

Φ Ω

left to right way of writing

Total number of columns:
8+8+15+15+6+6+5

+9+9+4=85

8 5

Ω Φ

right to left way of writing

Attic Type (contracted)
1 2 3
Φ Ω Σ

500 800 200

"LIGHT" (phôs)

1500

Φ Ω Σ

5 8 2

1+5+0+0

Θ Ε Ο Σ

90 50 70 200

"GOD"

284

8 columns + 6 columns = 14 columns

14

5

† <https://en.wikipedia.org/wiki/Earth_radius>

Equatorial: a = (6378.1370 km), polar: b = (6356.7523 km), and the numerical mean radii of the Earth as defined in the revision of the *World Geodetic System 1984*.

$\frac{2a+b}{3} = 6371.0088$ km

Theory of Semiotics
denotation = connotation
x = y

x = 17 columns on the long side & 8 columns on the narrow side, y = 6+3+7+1=17 & .0088
x=y: 17 κίονες = 6+3+7+1=17 (D.R. of 6371 km), 2 rows of 8 columns = (α) 8, (β) 8 ‡

Τ Η Σ Α Θ Η Ν Α Σ
300 8 200 1 9 8 50 1 200

"ATHENA'S"

777

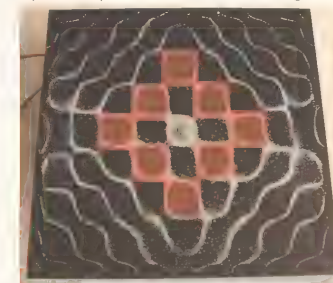
7+7+7

21

2+1

3

<<https://www.youtube.com/watch?v=vvJAgUBF4w>>



4840 Hz

D.R. of 4840 = 3

Φ Α Ψ Ο Σ

500 1 6 70 200

"LIGHT" (pháeos)

777

7+7+7

21

2+1

3

† The alphanumeric values of the Light or (pháos), "ΦΑΟΣ," = 771, Light or (phôs), "ΦΩΣ," = 1500, and "O PARTHENON," "Ω ΠΑΡΘΕΝΩΝ," = 1895 align on the same row in the 4x49 dimension table, while their digital roots match and equal 6. Additionally, 777 equals the equivalences of the word ATHENA'S, "ΤΗΣ ΑΘΗΝΑΣ," and the word of light or (phawos), "ΦΑΦΟΣ." ‡

	$F_1(\text{mod } 97)=0, F_1(\text{mod } 10)+F_2(\text{mod } 97)=1, \dots, F_1(\text{mod } 97)+\dots+F_5(\text{mod } 97)=7, \dots, F_1(\text{mod } 97)+\dots+F_{196}(\text{mod } 10)=9312$																									
	ΠΙΝΑΚΑΣ 4x49																									
1η γραμμή	0	1	2	4	7	12	20	33	54	88	143	232	279	318	404	432	449	494	556	566	638	720	777	819	[...]*	
1η γραμμή	[...]*	821	865	911	1001	1040	1072	1143	1149	1226	1309	1372	1421	1436	1500	1579	1625	1653	1727	1732	1811	1895	1961	2014	2036	2111

GREEK ALPHABET | CIRCLE | 27 LETTERS

OBSERVATIONS

Φ Ω Σ (phōs), Φ Ω Σ (phōōs), Φ Α Ο Σ (pháos)
Φ Α Ψ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 45

† <https://earthobservatory.nasa.gov/features/Milankovitch/milankovitch_2.php>

The change in Earth's axial tilt (obliquity) affects the magnitude of seasonal change. At higher tilts, seasons are more extreme, and at lower tilts, they are milder. The current axial tilt is 23.5°.

Image by Robert Simmon, NASA Goddard Space Flight Center:



† The average of the two extreme terms, 22.1° and 24.5° is 23.3°. The alphanumeric value of the epic word ΓΑΙΑ for Earth is 23. This word is found, for example, in Hesiod's Theogony (8th century BC).‡

Η Γ Α Ι Α

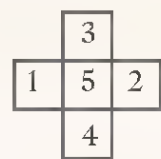
8 3 1 10 1

"THE EARTH"

23

2+3

5



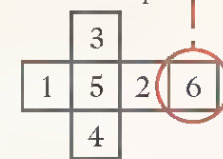
(a) The D.R. of 5 can represent in a grammatical design syntax five squares arranged to form a cross.

Eastern cella with the statue of Athena
Columns: 10+10+3=23. D.R. of 23: 2+3=5

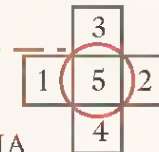
(b) The cube is the Platonic solid for Earth ("Timaeus," Plato).



Cube development



(c) The formation from the D.R. of GAIA (Earth, 5) is part of the cube's development, symbolizing Earth as a Platonic solid.



† Regarding the calculation of the speed of light:

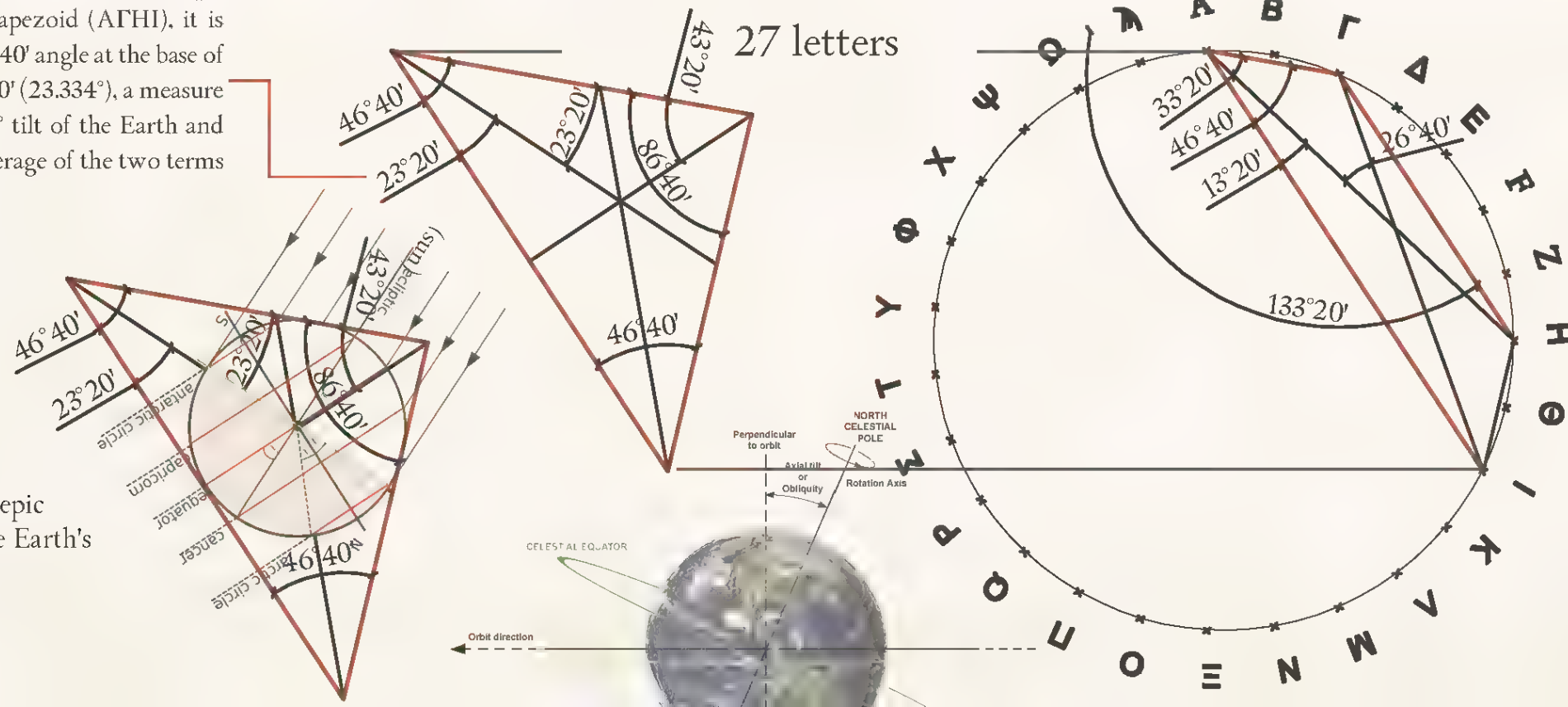
In ancient texts (up to 10% preserved), there is no reference to attempts to measure the speed of light by any experimental method. However, a valid analogy between empirical experiments can be found in the distances between Albert A. Michelson's experiment (35 kilometers, the distance between his two mirrors for calculating the speed of light) and ancient measurements for calculating Earth's circumference. Eratosthenes (276–195/194 BC) used the distance of 39,060 to 40,320 km for his geometric calculations and found Earth's circumference with an error margin of -2.4% to +0.8%. [online] Available at: <https://en.wikipedia.org/wiki/Eratosthenes> ‡

† Note that there is no official reference to the existence of the meter (m) as a unit of length in antiquity. However, its presence with high accuracy is observed on another continent in the stone architectural elements of the archaeological site Pumapunku (300 to 1000 AD) in Tiahuanaco, Bolivia, when measured with a laser distance meter. ‡

† In the 27-letter alphabet, when searching for the eccentric point of the isosceles triangle that forms the isosceles trapezoid (ΑΓΗΙ), it is observed that half of the 46°40' angle at the base of the isosceles triangle is 23°20' (23.334°), a measure that approximates the 23.5° tilt of the Earth and is extremely close to the average of the two terms 22.1° and 24.5°. ‡

Γ Α Ι Α (GAIA, EARTH)

27 letters



Isosceles circle triangle of the epic word 'GAIA' (=ΓΑΙΑ) and the Earth's axial tilt.

† Brigitte L. M. Bauer (2017). *Nominal Apposition in Indo-European: Its Forms and Functions, and Its Evolution in Latin-Romance*. De Gruyter. Σελίδα 207:

The unit of measurement referred to as a "mile" today has its roots in antiquity, with its Roman version called "mille passus" or "thousand paces." The Romans developed the Greek metric system in their measures and weights.

Due to the destruction of texts, it cannot be precisely judged whether they received it or invented it. Primarily, the scientific knowledge of those times was classified as secret (not taught to the general public).

GREEK ALPHABET | CIRCLE | 27 LETTERS | Φ Ω Σ (phôs), ΦΟΩΣ (phôôs), Φ Α Ο Σ (pháos) Φ Α Ξ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 46

Regarding the technological means of antiquity and the existing Greek literature, the observations do not justify the exact coincidental "semiotically equivalent" correlation with the speed of light, the numerical values of the letters, and the angles of the circle. However, it is presented as a remarkable coincidence that exists from the formation of the letters to produce the signifiers "PYR" fire and "FOS" light ‡

‡ Diels, H. 1903 *Die Fragmente der Vorsokratiker*. Berlin: Weidmannsche Buchhandlung, p. 44, 144, 171, 247, 254, 290, 361, 496 [online] Available at <https://openlibrary.org/works/OL1310441W> *Die Fragmente der Vorsokratiker* [Accessed 9 Apr 2023]

«Ἐμπεδοκλῆς θς ἔλεγε· ἀπορρέει τὸ πῶς σῶμα δι' ἐκ τοῦ πρωτίζοντος σώματος γινέσθαι πρῶτον ἐν τῷ μεταξὺ τόπῳ τῆς τῆς γῆς καὶ τοῦ οὐρανοῦ εἶτα ἀρικνεῖσθαι πρὸς ἡμᾶς λαβάνει δὲ τῇ τοιαύτῃ αὐτοῦ κίνησιν διὰ τὴν ταχύτητα.»

Translation: "Empedocles said that light is a body emitted from the illuminating body, first forming in the intermediate space between the earth and the sky, then reaching us with such motion being imperceptible due to its speed."

Empedocles, 5th century BC, a Pythagorean philosopher, physicist, engineer, inventor, physician, musician, and poet, perceived light as a particle that starts from the Sun and reaches the Earth, having developed a speed through space. However, he did not mention any experiment to measure the speed of light. ‡

‡ Hero of Alexandria, 1st century AD, an engineer and geometer, and Claudius Ptolemy, 2nd century AD, in their works "Mechanics" and "Optics," respectively, refer to the properties of light, such as refraction and reflection, but they did not measure its speed. ‡

‡ [online] Available at https://en.wikipedia.org/wiki/Foucault%27s_measurements_of_the_speed_of_light

In 1676, Danish astronomer Ole Rømer made the first quantitative estimate of the speed of light by observing delays in the eclipses of Jupiter's Moon Io. Rømer estimated that light would take about 22 minutes to travel a distance equal to the diameter of Earth's orbit around the Sun. Using modern values of the orbits, this would mean that the speed of light is 226,663 kilometers per second, which is 24.4% lower than the actual value of 299,792 km/s. In his calculations, Rømer used the idea and observations that the apparent time between eclipses would be longer as Earth moves away from Jupiter and shorter as it approaches. ‡

‡ [online] Available at https://en.wikipedia.org/wiki/Hippolyte_Fizeau

Hippolyte Fizeau, 1819-1896, was a French physicist, a member of the Academy of Sciences, and its President in 1878. In 1848-49, he experimentally measured the speed of light.

The method used by Fizeau is known as the "rotating wheel method." To measure the speed of light, he used a flashing light source directed toward a mirror located at a distance of 8,632 meters. Between the source and the mirror, he placed a rotating toothed wheel, through which light could either pass or be blocked by the teeth. By appropriately adjusting the rotation speed of the wheel, he managed to calculate the value as 313,274,304 m/s, 5% deviation from the current value.

‡ [online] Available at https://en.wikipedia.org/wiki/Foucault%27s_measurements_of_the_speed_of_light

In 1862, Léon Foucault improved Fizeau's method using a rotating mirror and measured the speed of light at approximately 298,000 km/s, closer to the modern value. In 1851, he provided an experimental demonstration of the rotation of the Earth on its axis: diurnal motion.

‡ [online] Available at https://en.wikipedia.org/wiki/Foucault%27s_measurements_of_the_speed_of_light

In 1879, Albert A. Michelson, using a rotating and fixed flat mirror, achieved even more precise measurements. The value he measured was approximately 299,796 km/s with a 0.6% deviation from the current value. ‡

‡ [online] Available at https://en.wikipedia.org/wiki/Speed_of_light

In the 1950s, the speed of light was measured using radar reflections from the surface of the Moon and other planets, yielding a value close to the accepted modern value. In 1950, Louis Essen determined the speed as 299,792.5±3.0 km/s, using cavity resonance.

In 1972, the National Institute of Standards and Technology (NIST), using a laser and a Fabry-Pérot interferometer, determined the speed of light in a vacuum to be 299,792,457.4±0.1 m/s with a fractional uncertainty of 3.5×10⁻⁹.

In 1983, the 17th General Conference on Weights and Measures (CGPM) defined the meter as the distance light travels in a vacuum in 1/299,792,458 of a second, establishing the speed of light as exactly 299,792,458 m/s. ‡

‡ Aristotle, *Metaphysics*. DOI: 10.4159/DLCLaristotle-metaphysics.1933

A, 5, 985b, [25-33] "V. At the same time, however, and even earlier, the so-called Pythagoreans appeared themselves to mathematics, and were the first to develop this science; and through studying it they came to believe that its principles are the principles of everything. And since numbers are by nature first, among these principles, and they fancied that they could detect in numbers to a greater extent than in fire and earth and water, many analogues of what is and comes into being—such and such a property of number being, justice and

such and such some or more, another opportunity and similarly, more or less with all the rest—and since they saw further that the properties and ratios of the musical scales are based on numbers."

A, 5, 986a, 986a[1]-986b[3] "And since it seems clear that all other things have their whole nature modeled upon numbers, and that numbers are the intimate things in the whole physical universe, they assumed the elements of numbers to be the elements of everything, and the whole universe to be a proportioning or number. Whatever analogues to the processes and parts of the heavens and to the whole order of the universe they could exhibit in numbers and proportions, these they connected and correlated, and if there was any deficiency anywhere, they made haste to supply it, in order to make their system a connected whole. For example, since the decad is considered to be a complete thing and to comprise the whole essential nature of the numerical system, they assert that the bodies which revolve in the heavens are ten, and there being only nine, that are visible, they make the "anti-cthon" to be the tenth. We have treated this subject in greater detail elsewhere, but the object of our present review is to discover from these thinkers too what causes they assume, and how these coincide with our list of causes. Well, it is obvious that these thinkers too considered number to be a first principle, both as the material of things and as constituting their properties and states. The elements of number according to them are the Even and the Odd. Of these, the former is finite, and the latter infinite. Unity consists of both, since it is both odd and even. If number is derived from Unity, and number, as we have said, composes the whole sensible universe, it is a contemporary with the origination of Pythagoras, and all his doctrines were very

similar to theirs. He says that the majority of things in the world of men are in pairs, but the contraries which he mentions are not, as in the case of the Pythagoreans, carefully defined, but are taken at random, e.g., white and black, sweet and bitter, good and bad, great and small. Thus Anaxagoras only threw out vague hints, with regard to the other instances of contrariety, but the Pythagoreans pronounced how many, and what the contraries are."

Aristotle, *On the Soul*. DOI: 10.4159/DLCLaristotle-soul.1957

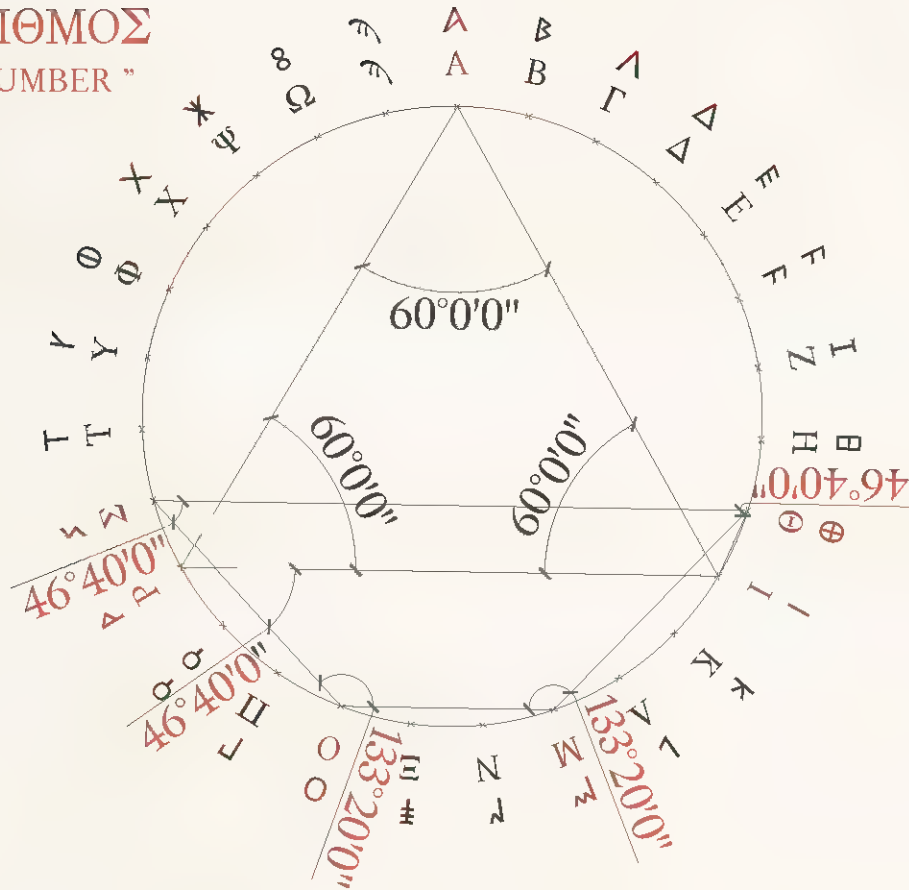
404b[16-28] "In the same way, in the *Timaeus*, Plato constructs the soul out of the elements. For he maintains that "like" can only be known by "like," and that from these first beginnings grow the things which we perceive. A similar definition is laid down in his comments *About Philosophy*, where he maintains that the living universe is derived from the idea of the One, and from the primary length, breadth, and depth, and everything else in the same way. But he also gives another account that mind is One, and knowledge. This, for there is only one straight line from one point to another, and the number of the plane (Three is opinion, and the number of the cube (Four is sensation. For numbers are alleged to be identical with the forms themselves, and intimate principles, but they are composed of the elements. The sensible world is apprehended in some cases by mind, in others by knowledge, in others again by opinion, and in others by sensation, and these numbers are the forms of things."

GREEK ALPHABET | CIRCLE | 27 LETTERS

OBSERVATIONS

Φ Ω Σ (phôs), Φ Ο Ω Σ (phôōs), Φ Α Ο Σ (pháos)
Φ Α Ψ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 47

ΑΡΙΘΜΟΣ
"NUMBER"



Principle of Correspondence (Hermetic Principle II)

"As above, so Below; as Below, so above [...] This principle embodies the truth that there is always a correspondence between the laws and phenomena of the various planes of being and life." *The Emerald Tablet of Hermes & The Kybalion*

Subject: **Hermeticism / Occultism**

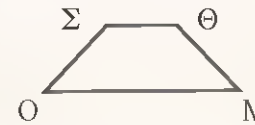


† Several ancient philosophers believed that numbers are the building blocks of existence. What can be observed in the word "number" (αριθμός) is a semiotic relationship between the shapes of the geometric image (geo-lexical identity or geo-dorwid) of the Greek word 'ΑΡΙΘΜΟΣ' and basic geometric shapes of architecture. ‡

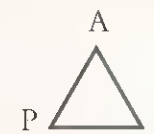
† Barthes, Roland (2019). *Image, Music, Text*. Translated by: Giorgos Spanos. Athens (Greece): Plethron Books

The shapes created in the circle are:

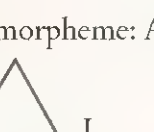
Isosceles trapezoid:



Isosceles triangle:

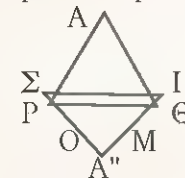


Equilateral triangle:



Pentagram star: lexicographic morpheme: ΑΡΙΘΜ-

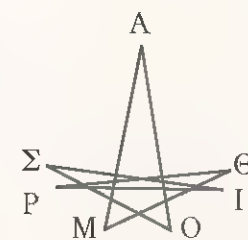
Hexagram star:



Heptagram star -ΑΟΘΙΣΜΑ-:

by anagram,

the word ΑΘΡΟΙΣΜΑ (sum) emerges.



The above shapes (along with the circle) are the foundation for producing design compositions. For example, these shapes structure all the monuments of the ancient world. Without them, there is no architectural composition and realized architectural work. At the construction site, craftsmen use geometry, and through these shapes, they construct the architectural work.

Barthes, R. (1977). *Image, Music, Text*. Essays selected and translated by S. Heath. London: Fontana Press, an imprint of HarperCollins Publishers.

The geometric image generates polysemy, creating a question about the meaning of the representation of the lines in the circle (denotative message). Inevitably, it produces a second message (connotative), constituting a coded system within the global symbolism of art and architecture.

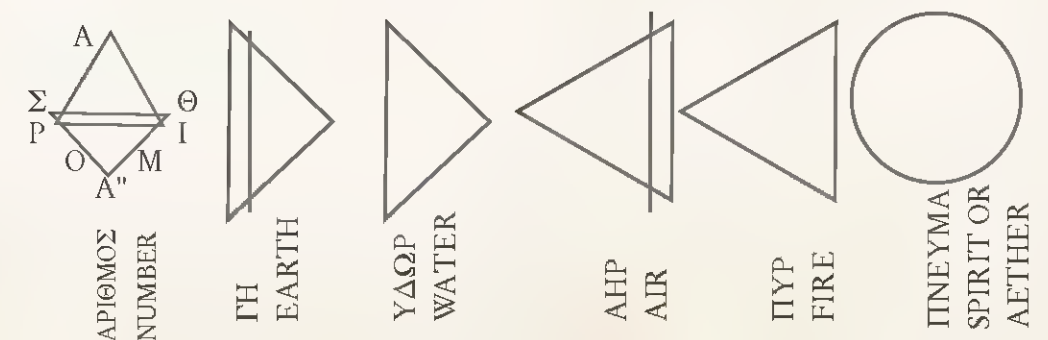
That is when the lines are connected and the shapes are related to each other, they produce a clear analogy with the reality of design. "The 'language' of shapes is universal, but it depends on the 'knowledge' of the reader and the ability to recognize it." Essentially, in the image of the circle, "real systems of signs and not merely agglutinated fluid symbols" emerge. The iconic nature silently transmits the philosophy of the Pythagoreans and other philosophers regarding the structural nature of the word number and leaves the mind of each philosopher to reflect on this word. ‡

† Hermes Trismegistus & The Three Initiates (2020). *The Emerald Tablet of Hermes & The Kybalion*. Augusta, GA: Quicktime Press.

Μετάφραση από Aurelium Occultae Philosophorum Georgio Beato:

1. This is true and remote from all cover of falsehood.
2. Whatever is below is similar to that which is above. Through this the marvels of the work of one thing are procured and perfected.
3. Also, as all things are made from one, by the consideration of one, so all things were made from this one, by conjunction.
4. The father of it is the sun (fire), the mother the moon (water).
5. The wind bore it in the womb. Its nurse is the earth, the mother of all perfection..
6. 6α) Its power is perfected.
7. If it is turned into earth, (7α) separate the earth from the fire, the subtle and thin from the crude and course, prudently, with modesty and wisdom.
8. This ascends from the earth into the sky and again descends from the sky to the earth, and receives the power and efficacy of things above and of things below.
9. By this means you will acquire the glory of the whole world, and so you will drive away all shadows and blindness.
10. For this by its fortitude snatches the palm from all other fortitude and power. For it is able to penetrate and subdue every-thing subtle and everything crude and hard.
11. 11α) By this means the world was founded,
12. and hence the marvelous conjunctions of it and admirable effects, since this is the way by which these marvels may be brought about.
13. And because of this they have called me Hermes Trismegistus since I have the three parts of the wisdom and Philosophy of the whole universe.
14. My speech is finished which I have spoken concerning the solar work.

On a third level of reading, symbols derived from *Hermetic tradition* can be extracted, and the names can be defined according to a design logic structure with a deeper knowledge of chemistry. Earth as a closed inverted vessel that holds. Water is an open inverted vessel that receives. Fire (=PYR') with a triangular rendering without a line diffused and part of the universe (Heracitus' philosophy). Air (from the Greek letters 'ΑΙΡ') is a triangular rendering without a line that is found everywhere. Circle as the "infinite" spirit (or ether) that encompasses everything. ★ ‡



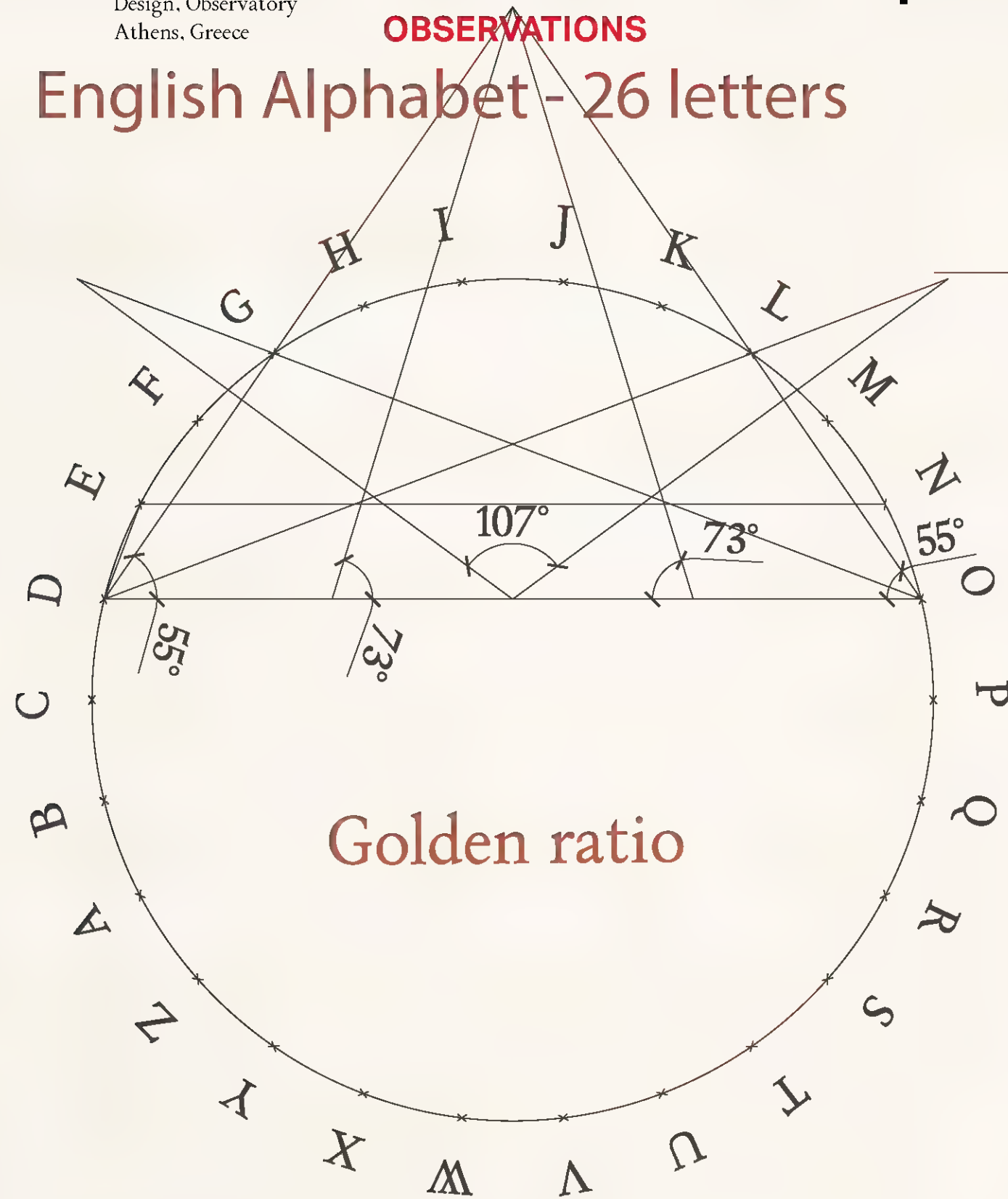
GREEK ALPHABET | CIRCLE | 27 LETTERS

Φ Ω Σ (phôs), Φ Ο Ω Σ (phóōs), Φ Α Ο Σ (pháos)
Φ Α Ψ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 48

OBSERVATIONS

English Alphabet - 26 letters

Greek Alphabet - 27 letters



Observation:

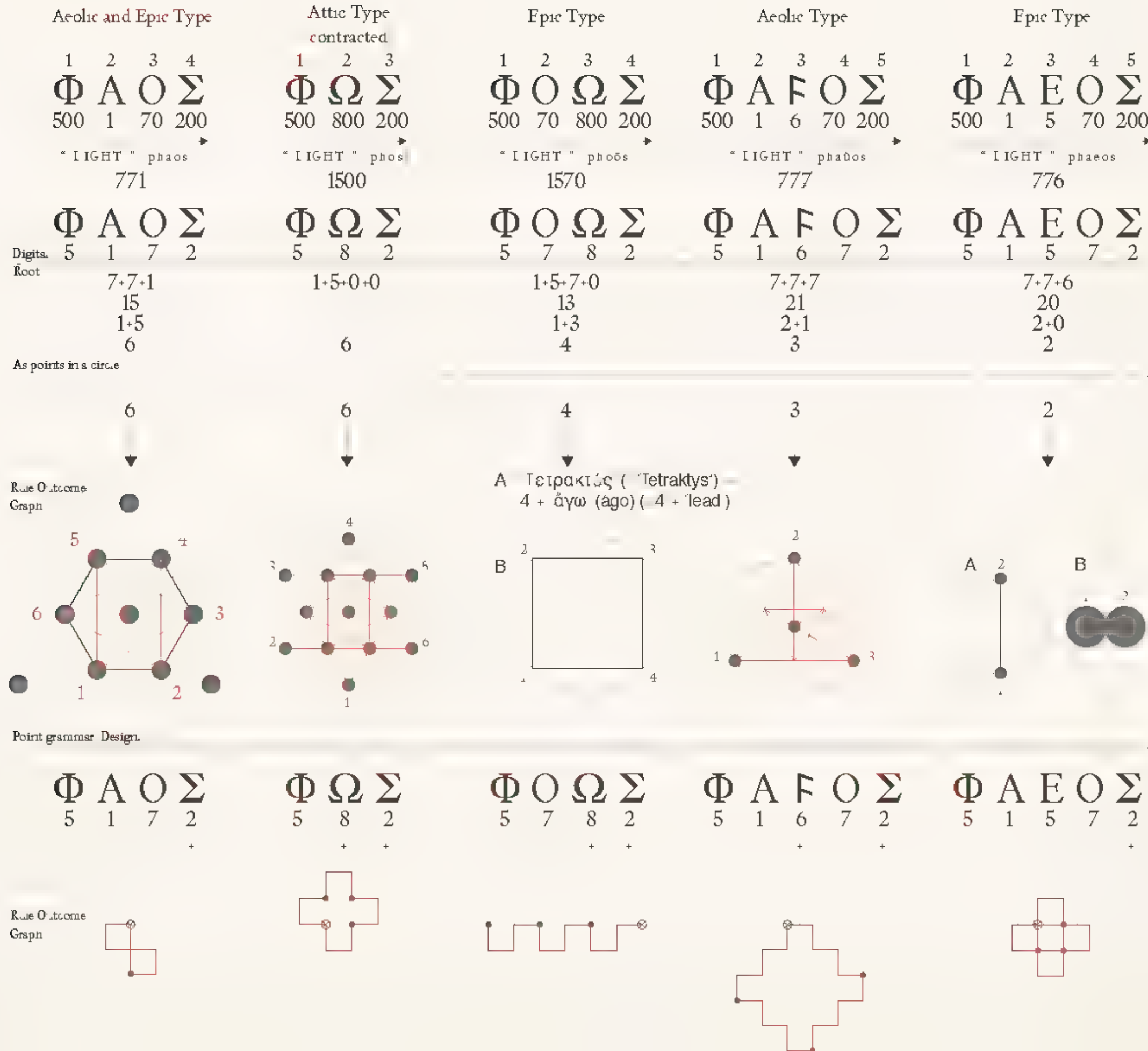
I present to you a design issue concerning some words of the Golden Ratio in the English Alphabet after I wrote the word "golden" (Golden Ratio) in English. The same procedure was followed in the Greek Alphabet. In the circle of the English Alphabet, the angles 73° and 107°, "approach" the "golden" angles 72° and 108°. In the Greek Alphabet, the "golden" angles are appeared in the word "XPYΣOΣ" (= "GOLD"). This word creates a graceful and symmetrical shape when the points of letters are connected in a circle (via an algorithm). In the designing process, it is a fact that the "golden" angles are a key to creating a beautiful image. Furthermore, the angles are correlated with the sum of the digits of the sequence of Fibonacci numbers modulo 10.

The display of golden angles is used in art and architecture to highlight beauty as a tool of aesthetics through harmonious shapes. When writing "Gold," "golden," or harmonic angles appear in the English and Greek alphabet during geometric investigation. Those with basic knowledge of Euclidean Geometry could appreciate this observation.

GREEK ALPHABET | CIRCLE | 27 LETTERS

OBSERVATIONS

Φ Ω Σ (phôs), Φ Ω Σ (phóōs), Φ Α Ο Σ (pháōs)
Φ Α Ξ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 49



GREEK ALPHABET | CIRCLE | 27 LETTERS

Φ Ω Σ (phôs), Φ Ω Σ (phóōs), Φ Α Ο Σ (pháos)
Φ Α Ξ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 50

OBSERVATIONS

Epic & Attic (contracted) forms

[ΦΑΟΣ, ΦΩΟΣ] & [ΦΩΣ]

(pháos), (phóōs) & (phôs)



$$\widehat{\Phi\Sigma\Omega} + \widehat{\Sigma\Omega\Lambda} = 133^\circ20' + 53^\circ20' = 186^\circ40' = 186.666\bar{6}^\circ$$

$$\widehat{\Sigma\Phi\Omega} + \widehat{\Phi\Lambda\Omega} = 140^\circ0' + 46^\circ40' = 186^\circ40' = 186.666\bar{6}^\circ$$

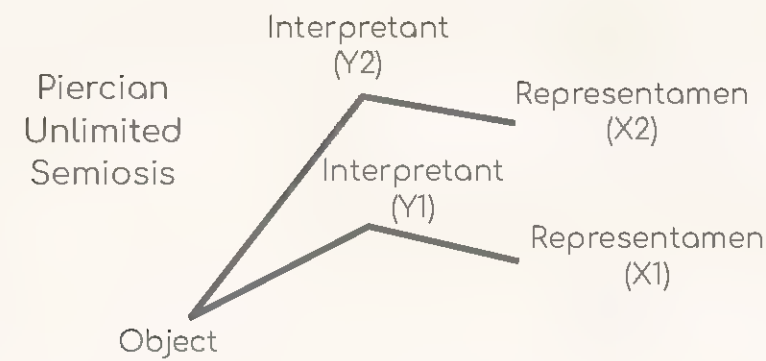
$$\widehat{\Omega\omega\Lambda} + \widehat{\Omega\jmath\Lambda} + \widehat{\Omega\Phi\Sigma} + \widehat{\Omega\Omega\Sigma} + \widehat{\Phi\Omega\Sigma} = 299^\circ20' = 299.333\bar{3}^\circ$$
$$60^\circ0' + 33^\circ20' + 140^\circ0' + 40^\circ0' + 20^\circ0' = 299^\circ20'$$

$$\widehat{\Omega\Sigma\Omega} + \widehat{\Lambda\Phi\Sigma} + \widehat{\Phi\Omega\Omega} + \widehat{\Omega\Omega\Lambda} = 300^\circ0'$$
$$113^\circ20' + 126^\circ40' + 46^\circ40' + 13^\circ20' = 300^\circ0'$$

$$\widehat{\Sigma\Omega\Omega} + \widehat{\Phi\Sigma\Omega} = 40^\circ0' + 133^\circ20' = 173^\circ20' = 173.333\bar{3}^\circ$$

$$\widehat{\Phi\Lambda\Omega\Sigma\Lambda} + \widehat{\Phi\Omega\Sigma} = 360^\circ + 20^\circ = 380^\circ$$

Semiotic Relationship $x=y$ for x =signifier and y =signified. Semiotic Theory of Charles Sanders Peirce:



Exact values

metres per second 299,792,458

Approximate values (to 3 significant digits) 186282.397051220870118507913783504334685437047641772

kilometres per hour

miles per second 1,080,000,000

miles per hour ~186,000

astronomical units per day 671,000,000

parsecs per year 173

0.307

Wikipedia 2019 Speed of light [on the] A value at https://en.wikipedia.org/wiki/Speed_of_light

Φ Α Ο Σ

500 1 70 200

" PHAOS "

771

Φ Α Ο Σ

Digital Root 5 1 7 2

7+7+1

15

1+5

6

Φ Ω Σ

500 800 200

" LIGHT "

1500

Φ Ω Σ

5 8 2

1+5+0+0

6

Coincidence A:

$$186^\circ40' = 186.666\bar{6}^\circ$$

$$186,000 \text{ mi/s}$$

$$x=y: 186.666\bar{6}^\circ = 186,000 \text{ mi/s}, 186$$

Coincidence B:

$$(300^\circ + 299.333\bar{3}^\circ) / 2 = 299.67^\circ \approx 299.7^\circ$$

$$299,792,458 \text{ m/s} = \sim 300,000,000 \text{ m/s}$$

$$x=y: 299.7^\circ = 299,792,458 \text{ m/s}, 299.7$$

$$300^\circ = 300,000,000 \text{ m/s}, 300$$

Coincidence C:

$$173^\circ20' = 173.333\bar{3}^\circ$$

$$173,144,632,674,240 \text{ au/d}$$

$$x=y: 173.1446^\circ = 173,333 \text{ au/d}, 173$$

Coincidence D:

Archaic Type "ΦΑΟΣ" = 771

Assuming that 771 represents a frequency magnitude in THz. Unit conversion:

$$771 \text{ THz} = 388.83587289 \text{ nm} = \sim 389 \text{ nm}$$

$$x=y: 380^\circ \approx 389 \text{ nm}$$

389nm: Corresponds to the color purple, traditionally depicted as the 6th energy center of the human body (Third Eye, Ajna Chakra). In this state, the person is enlightened; their brain is flooded with light.

$x=y$: Digital Root of 'ΦΑΟΣ', 'ΦΩΣ': 6 = 6th energy center associated with pineal gland activation (enlightenment)

GREEK ALPHABET | CIRCLE | 27 LETTERS |

OBSERVATIONS

Φ Ω Σ (phôs), Φ Ο Ω Σ (phóōs), Φ Α Ο Σ (pháōs)
Φ Α Ψ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 51

† resonance, vibration

Available at <https://www.britannica.com/science/resonance/vibration>

Resonance, in physics, relatively large selective response of an object or a system that vibrates in step or phase, with an externally applied oscillatory force. Resonance was first investigated in acoustical systems such as musical instruments and the human voice. An example of acoustical resonance is the vibration induced in a violin or piano string of a given pitch when a musical note of the same pitch is sung or played nearby.

The concept of resonance has been extended by analogy to certain mechanical and electrical phenomena. Mechanical resonance, such as that produced in bridges by wind or by marching soldiers, is known to have built up to proportions large enough to be destructive, as in the case of the destruction of the Tacoma Narrows Bridge in 1940. Spacecraft, aircraft, and surface vehicles must be designed so that the vibrations caused by their engines or by their movement through air are kept to a safe minimum.

‡ Carl G. Jung, *The Red Book*, Page 236

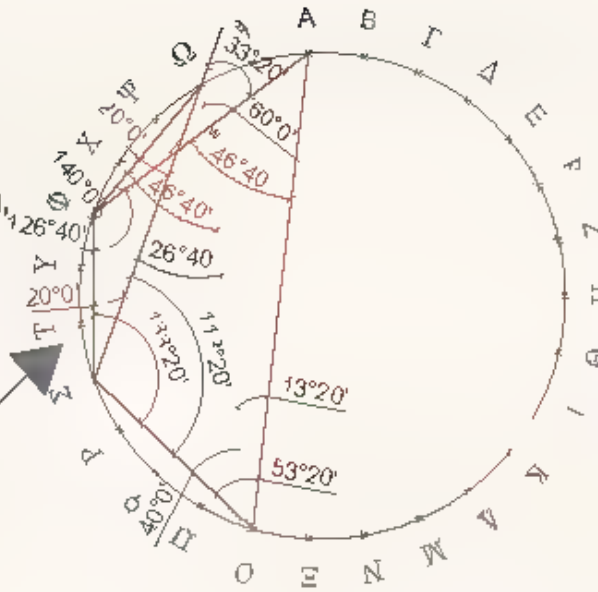
"Notice what the ancients said in images: the word is a creative act. The ancients said, 'In the beginning was the Word.' Consider this and think upon it. The words that oscillate between nonsense and supreme meaning are the oldest and truest."

My following reasoning stems from the alchemists' occult tradition, Pre-Socratic doctrines of the transmutation belief, and the hermetic principles of 2. correspondence and 3. vibration. The angles beget a fundamental vibrational pattern in a circle via their numeric values and produce a coherent resonance with the speed of light. The individual's words resonate with the photons that travel in the vacuum. This resonance can be likened to the coherent resonance patterns found in the human brain and heart—for example, in an altered state of consciousness—which operate harmoniously with natural frequencies. As such, the spoken word might achieve a form of vibrational coherence, aligning human thought and language with the fundamental energies of the universe. These relationships between angular geometric forms and the speed of light suggest a profound interplay between physical reality with its conventional scientific methods and the abstract realms of meaning and communication on an idealized semi-otic connotative level.

Resonance - Sent wave causes other tuning to vibrate



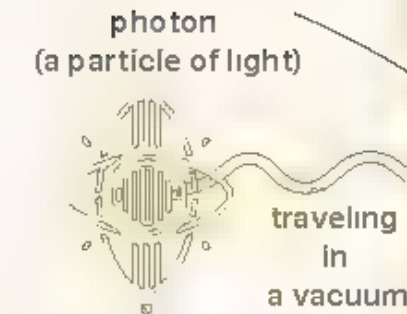
LIGHT:
Φ Ω Σ (phôs),
Φ Ο Ω Σ (phóōs),
Φ Α Ο Σ (pháōs)
Φ Α Ψ Ο Σ (phawos),
Φ Α Ε Ο Σ (pháeos)



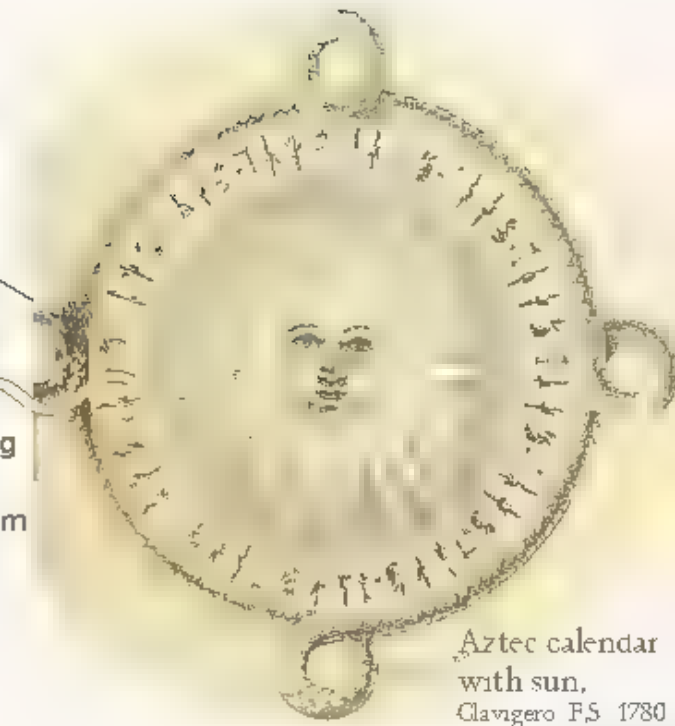
$$186^{\circ}40' = 186.6666^{\circ}$$

$$299^{\circ}20' = 299.3333^{\circ}$$

$$173^{\circ}20' = 173.3333^{\circ}$$



186 000 mi/s
299 792 458 m/s
~300 000 000 m/s



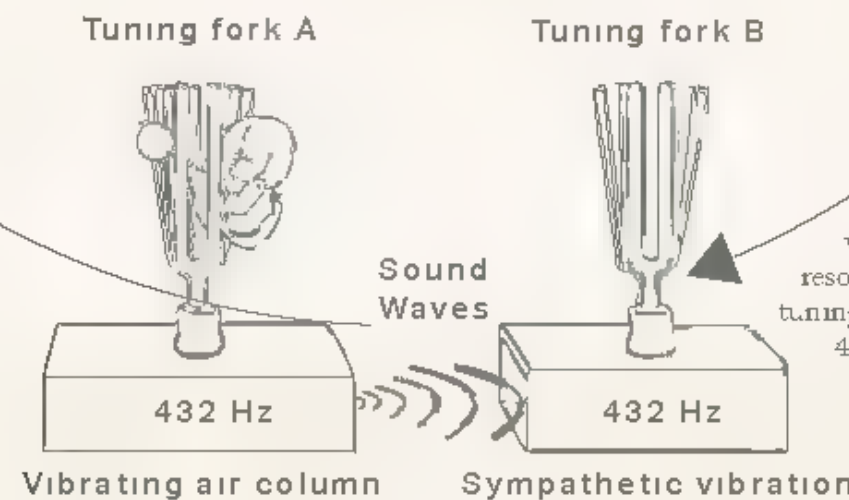
Aztec calendar with sun.
Clavigero FS 1780
Storia antica del Messico cavata da migliori storia spagnuola e da manoscritti e dalle pitture antiche del Messico.
Tomo II. Cesena. Per Gregorio Biasini all'Insegna di Pallade.
Engraving Courtesy of the John Carter Brown Library.
Attribution: ShareAlike 4.0 International.
a. CC BY SA 4.0
[online] Available at <https://www.jackandjane.com/history-images/710015393/0-See-also-Mexico>

Semiotic Coherent Resonance System

denotation = connotation ↔ x=y:

- (i) 300° = 300 000 000 m/s, 300
- (ii) 186.6666° = 186,000 mi/s, 186
- (iii) (300°+299.3333°)/2=299.67°=~299.7°
x=y: 299.7° = 299 792 458 m/s, 2997

Resonance of Sound Waves



The image illustrates the resonance of sound waves using two tuning forks, A and B, set to 432 Hz. When tuning fork A is struck, it produces sound waves that cause tuning fork B to vibrate sympathetically, demonstrating the resonance phenomenon. In a different case, if one tuning fork is set to 321 Hz while the other is set to 432 Hz, the first one will not resonate when the other produces sound waves, as resonance occurs only when both tuning forks have the same frequency.

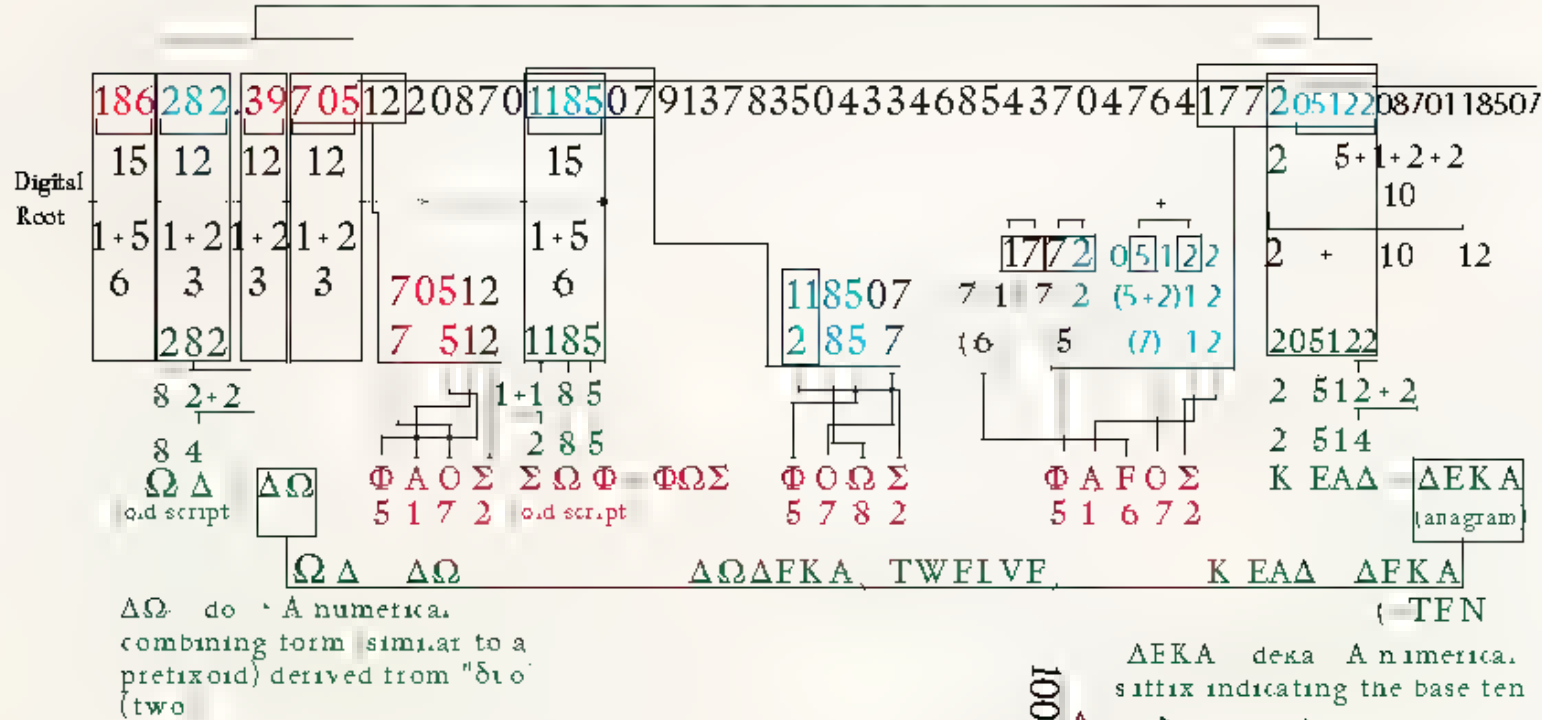
Circularity of a Semiotic Code

OBSERVATIONS


† Coincidence A

† By applying the relationship $x \sim y$ Semiotics of Charles Sanders Peirce, the following is deduced.

Substitutions of the digital roots units 1-9 with letters


$$\begin{array}{cccccc} \Delta & \Omega & \Delta & E & K & A \\ 4 & 800 & 4 & 5 & 20 & 1 \end{array}$$

“ TWELVE ”
834

Digits. 

Root

1	2	3	4	5	6
Δ	Ω	Δ	E	K	A
4	8	4	5	2	1
" Δ Ω "			" TEN "		

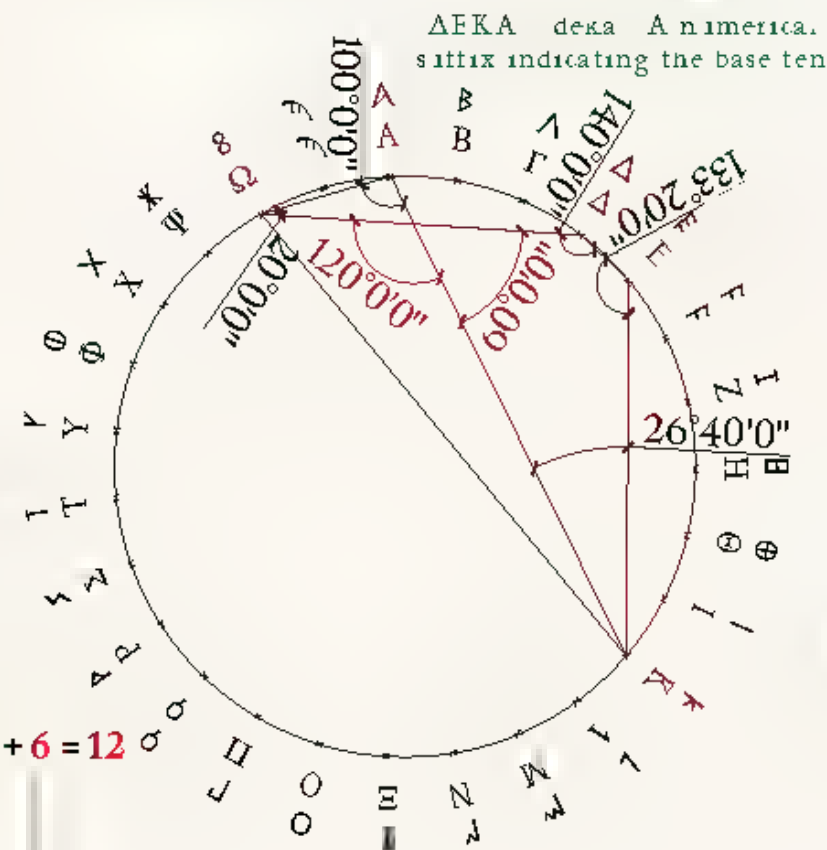
$$\begin{array}{r} 4 + 8 \\ 12 \\ 1 + 2 \\ - \mathbf{3} \end{array} \qquad \begin{array}{r} 4 + 5 + 2 + 1 \\ 12 \\ 1 + 2 \\ - \mathbf{3} \end{array}$$

3 + 3

Digits Root **6**

$$1 + 2 = 3$$

Digital root of $120^{\circ}0' = 3^{\circ}0'$



Digital root of $60^{\circ}0'$ is $6^{\circ}0'$

Digital root of $120^{\circ}0' - 3^{\circ}0'$

299,792,458 metres per second

2
Σ

58

$$\Phi\Omega = \Phi\Omega\Sigma = \Phi\Omega : \rho i \zeta \alpha$$

Theory of Semiotics

denotation = connotation

$$x = y$$
$$x = 186^{\circ}40' = 186,6666^{\circ}, y = 186,000 \text{ m/s}$$

$x=y: 186.\underline{66}\ \underline{66}\ \underline{66}^\circ = 186,282.39705\text{ m/s}, 186\text{ ως κοινά ψηφία}$

$$\begin{array}{r} 6+6 \quad 12 \quad 6+6 \quad 12 \quad 6+6 \quad 12 \\ 2+8+2 \quad 12 \quad 3+9 \quad 12 \quad 7+0+5 \quad 12 \\ \hline 186 \quad 282.39 \quad 705 \end{array}$$

† In the 3rd book III, 1, 5-6 "On Architecture" 30 20 BC , the Latin Marcus Vitruvius Pollio Roman architect and engineer , mentions DOI 10.4159/DLCL/vitruvius-architecture-1931

"5 Moreo, er they collected from the members of the human body the proportionate dimensions which appear necessary in an building operations the finger or inch the palm the foot the cubit And these they grouped into the perfect number 2 which the Greeks call teleon perfect

Now the ancients determined as perfect the number which is called ten 1 For from the hands they took the number of the inches; from the palm, the foot was discovered. Now while in the two palms with their fingers, ten inches are naturally complete, Plato considered that number perfect, for the reason that from the individual things which are called monades among the Greeks, the decad² is perfected. But as soon as they are made eleven or twelve, because they are in excess, they cannot be perfect until they reach the second decad.

For individual things are minor parts of that number 6 But mathematicians disputing on the other side have said that the number called six is perfect for the reason that this number has divisions which agree by their proportions with the number six [] therefore because it is produced from two simple numbers they can diasios [6+6] [...] 7 Not less also because the foot has the sixth part of a man's height and also because six times that is the number six in that it is completed by the number of feet determined the height of the body they fixed that number as perfect observing that the cubit consists of six palms and twenty four fingers 8 But afterwards they perceived that both numbers were perfect both the six and the ten and they threw both together and made the most perfect number sixteen " †

† **Observation A1:** It coincidentally emerges that the first three digits of the speed of light, 186, coincide numerically with the integral digits 186 of the angles when applying the semiotic relationship $x \rightarrow y$ ‡

† **Observation A.2:** Overall, the digits of the speed of light form the words ΔΩ DO, ΔΕΚΑ DEKA, and ΦΩΣ FOS. If the first two words are combined, the word ΔΩΔΕΚΑ DODEKA, meaning twelve is formed. Anagrams are common in the Greek language – see page 36 'ΟΠΛΙΤΗΣ HOPLITE and 'ΠΟΛΙΤΗΣ civilian: The omicron, O, is in the first place of hoplite due to the possible association of the shield's plan with the general urban radial plan of an ancient city; the warrior protects the town. The "boustrophedon" writing style was one of the writing methods of the Greeks before the 5th century BC and had a direction from right to left, Vertoudakis, B. 2007, Origin, evolution, and dissemination of the Greek alphabet ‡

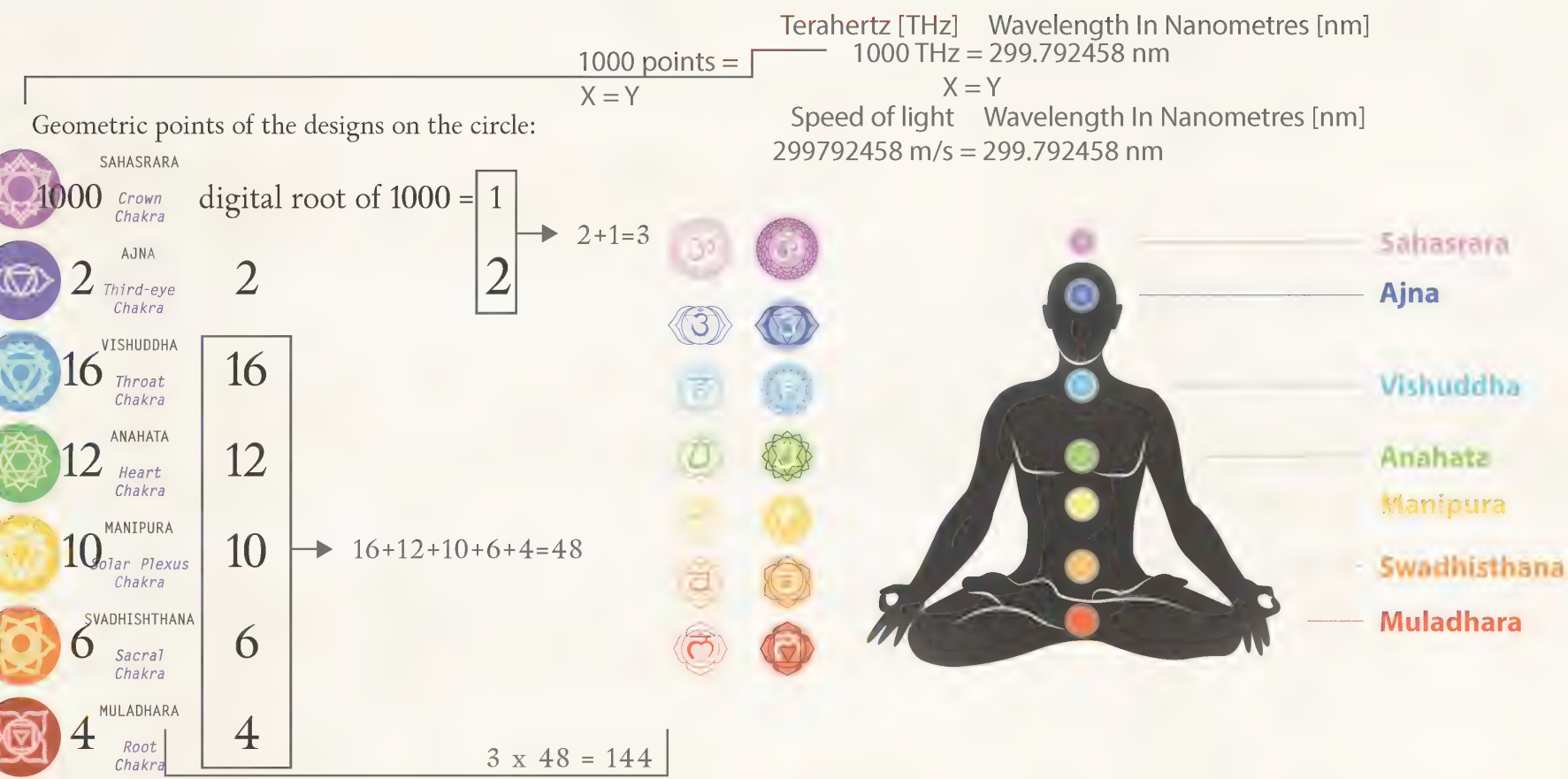
† **Observation A.3:** The grouping into 6 rectangles of integer and decimal digits produces the numbers 15 with a digital root of 6 and 12 with a digital root of 3. The isolation of the digits derives from the Pythagorean position on the nature of numbers. Successive selection of 2 groups of integers and 4 decimal digits. Numbers as creative entities, according to Pythagoras. ‡

† **Observation A.4:** Number Theory For the number 186, it holds that the digital root is 6. The number 6 is also the D.R. of the words of light $\Phi\Omega\Sigma$ PHOS and $\Phi\text{AO}\Sigma$ PHAOS. ‡

Φ Ω Σ (phôs), Φ Ο Ω Σ (phóōs), Φ Α Ο Σ (pháos)
Φ Α Ψ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 53

The treatise extensively refers to the allegorical teachings of religions and the occult teachings (of cultures). This work describes "*the first seed [Kundalini] is formed in the solar plexus of every individual, commencing at the age of twelve, which we have designated as the age of puberty. Thereafter, it is formed every 29½ days, this taking place in each individual at the time of the month when the moon is in the sign in which the sun was at the birth of the individual.*" Evidently, the phase of the Moon was taken as a mnemonic and empirical rule from Lunar Calendars due to their precision in such cases.

The most detailed description of the chakra system is found in the writings of the Tantra School, developed approximately between the 5th–11th century AD. ‡



Continuation of Coincidence B

REFERENCES

1. Muzdakis M. 4,500-Year-Old Egyptian Wood Statue With Rock Crystal Eyes Boasts Incredible Craftsmanship [Article on the Internet]. My Modern Met; 2021 Jun 29 [cited 2024 Feb 17]. Available from: <https://mymodernmet.com/ancinet-egypt-kaaper-statue/>

2. Wikipedia contributors. Archaic smile [Internet]. Wikipedia, The Free Encyclopedia; 2023 [cited 2024 Feb 17]. Available from: https://en.wikipedia.org/wiki/Archaic_smile

3. Wikipedia contributors. Kimbell seated Bodhisattva [Internet]. Wikipedia, The Free Encyclopedia; 2023 [cited 2024 Feb 17]. Available from: https://en.wikipedia.org/wiki/Kimbell_seated_Bodhisattva

4. Wikipedia contributors. Buddhism and Hinduism [Internet]. Wikipedia, The Free Encyclopedia; 2023 [cited 2024 Feb 17]. Available from: https://en.wikipedia.org/wiki/Buddhism_and_Hinduism

5. Seated Female Figure, Remojadas, 6th–9th century, Mexico, Mesoamerica [Internet]. New York: The Metropolitan Museum of Art; [cited 2024 Feb 17]. Accession Number: 1978.412.73. Available from: <https://www.metmuseum.org/art/collection/search/310525>

6. Rienjang W, Stewart P, editors. “The Global Connections of Gandhāran Art: Proceedings of the Third International Workshop of the Gandhāra Connections Project,” University of Oxford, 18th-19th March, 2019. 3rd vol. Oxford: Archaeopress Archaeology; 2019. p.20,27-104. Available from: https://issuu.com/carcoxford/docs/the_global_connections_of_gandharan_art

7. Sannella L. “Kundalini: Psychosis or Transcendence,” San Francisco: Henry S. Dakin Company; 1976. p.1. Available from: https://archive.org/details/kundalini-psychosis-or-transcendence_202306/page/8/mode/2up [cited 2024 Feb 17].

8. Bentov I. “Stalking the Wild Pendulum: On the Mechanics of Consciousness,” Destiny Books; 1988. p.180. Available from: <https://archive.org/details/itzhak-bentov-stalking-the-wild-pendulum-on-the-mechanics-of-consciousness> [cited 2024 Feb 17].

9. Bopp F. On the conjugation system of the Sanskrit language in comparison with that of the Greek, Latin, Persian and Germanic languages. Frankfort. 1816.

10. Saussure FD. Course in general linguistics. Baskin W, translator; Meisel P, Saussy H, editors. New York: Columbia University Press; 2011

11. Dale, C. “Kundalini: Divine Energy, Divine Life,” 1st ed. Woodbury, Minnesota: Llewellyn Publications; 1988. ISBN 978-0-7387-2863-6.

‡

Left Side: (a) Kouros from his temple. Archaeological Museum of Athens (late 6th century BC), (b) Head of a Kore (500-490 BC), Acropolis Museum. Right Side: (c) Buddhist statues: white head (Gautama Buddha) from the Gandhara archaeological site, 1st century BC - 6th century AD (Afghanistan). Ryukoku Museum Kyoto, (d) head from Sanjusangendo Temple (Kyoto) of the Kamakura period (1185-1333).

‡ The common denominator of these statues is the sanctity and the smile. According to the books "Kundalini-Psychosis or Transcendence" and "Stalking the Wild Pendulum: On the Mechanics of Consciousness," the smile results from the sense of euphoria from the activation of the pineal gland. The statues are formed in different cultural contexts. Buddha statues placed in a meditation position seem to connote a silent (secondary) meaning, organizing a connotation of the activated pineal gland. On the other hand, the facial features of the Kouroi, Kore, and the head in Kyoto resemble the smile in Buddha statues by coincidence. In Barthes' semiotics, the studium of these statues lies in their cultural contexts and symbolic meanings, such as the serene meditative pose of Buddha statues and the youthful divinity of Greek Kouroi and Kore. The punctum, however, is the shared smile, which evokes a personal sense of euphoria and sanctity, transcending their different cultural backgrounds. In Greek literature, there is no direct reference. However, a series of Mysteries and Teachings had a revelatory character and contributed to the oral and/or experiential transmission of secret knowledge. The claim that secret knowledge about the pineal gland activation was transmitted is invalid, as there is no source. ‡

Gautama Buddha with a slight smile in a meditation posture.

Seated woman with expressions of pain. Ceramic Sculpture, 6th – 9th century AD. Mexico, Mesoamerica, Veracruz, Tradition: Remojadas. The Metropolitan Museum of Art., N.1978.412.73 < <https://www.metmuseum.org/art/collection/search/310525> >

THE EYE OF HORUS, THE LIMBIC BRAIN & THE PINEAL GLAND

Figure 12.12

† Shoja, M. M., Hoepfner, L. D., Agutter, P. S., Singh, R., & Tubbs, R. S. (2015). History of the pineal gland. *Child's Nervous System*, 32(4), 583–586. doi:10.1007/s00381-015-2636-3

This article mentions that the pineal gland was identified with the Eye of Horus in Pharaonic Egypt. Galen (129-216 AD) in "On the Usefulness of the Parts of the Body" in which he gave it the name Bpineal^ because it resembled pine nuts (Greek κωυαριου, Latin glandula pinealis). In this study, he worked to refute a view, apparently prevailing at that time but of unknown origin, that the pineal gland regulated the flow of psychic spirit between the middle and posterior brain ventricles, although he accepted the immaterial spirit, he questioned the function of the "valve" of the pineal gland.‡

† The priest and scribe Ka'aper, with the smile and posture appearing in Greek Kouros statues (cultural influences), holds the secret knowledge (not taught to the general public). The statues of Kouroi and Kore are either the image of God himself or the image of the person offered to God. If it is God himself, he holds all the "secrets," while if offered to God, the "secrets" are revealed to him successively. In any case, the smile is inextricably linked with sanctity, while all the statues are carriers of the mystical spirit of their time. A major unanswered question is, "What did this smile ultimately mean?" ‡

Statue of Ka'aper (Cairo Museum, Egypt) with a smile: Ka'aper was a scribe and lector priest who held an official position and was found in excellent condition in his tomb (called "mastaba") in the Saqqara necropolis during the 5th dynasty of the Old Kingdom, around 2500 BC.

< <https://mymodernmet.com/ancinet-egypt-kaaper-statue/> >

GREEK ALPHABET | CIRCLE | 27 LETTERS

OBSERVATIONS

Φ Ω Σ (phôs), Φ Ο Ω Σ (phóōs), Φ Α Ο Σ (pháos)
Φ Α Ξ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 57

Continuation of Coincidence B

Observations related to the existence of knowledge about
the energy centers of the human body in antiquity

Φ Α Ο Σ	Φ Ω Σ	Φ Α Ξ Ο Σ
500 1 70 200	500 800 200	500 1 6 70 200
" PHAOS "	" IICHI "	" IICHI " phaōs
771	1500	777
Φ Α Ο Σ	Φ Ω Σ	Φ Α Ξ Ο Σ
5 1 7 2	5 8 2	5 1 6 7 2
7+7+1	1+5+0+0	7+7+7
15	6	21
1+5	6	2+1
6	6	3
6 + 6 12		

Theory of Semiotics

denotation = connotation
 $x = y$

† Archaic Form "ΦΑΟΣ" 771

Assuming that 771 represents a frequency magnitude in
terahertz [THz]

Conversion of wavelength units from terahertz [THz]
to nanometers [nm]

771 THz = 388.83587289 nm = ~389nm = x

777 THz = 385.83327928 nm = ~385nm = x

When we add the angles of the quadrilateral
ΦΑΟΣΖ with the angle ΦΩΣ the following results

$$\Phi\text{Α}\text{Ο}\Sigma\angle + \widehat{\Phi\Omega\Sigma} = 360^\circ + 20^\circ = 380^\circ = y$$

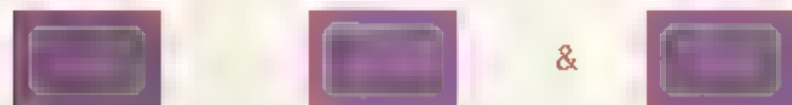
$$x=y: 380^\circ = 389\text{nm} \quad + 380(x) \quad 389(y) \quad \text{ή} \quad 385(y)$$

It is observed that the number 380 approximates 389 and coinci-
dentally seems to connote it

The biggest surprise concerns the conversion of nanometers to
colors in the light spectrum

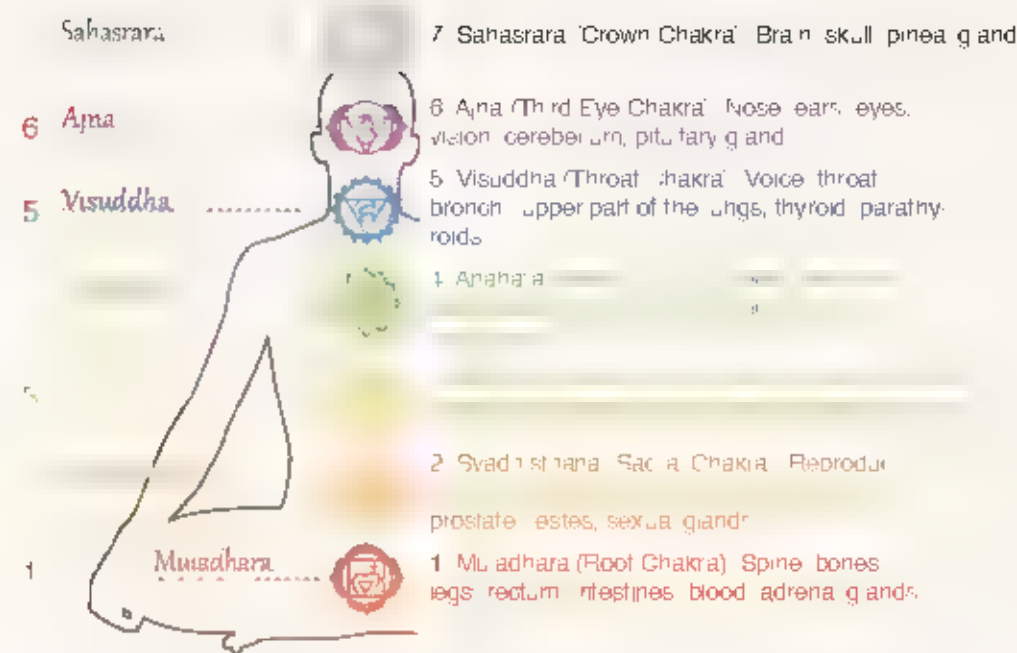
$$x=y: [380(x)] \quad [389(y)] \quad \& \quad [385(y)]$$

$$[\text{rgb}(97, 0, 97)(x)] \quad [\text{rgb}(120, 0, 136)(y)] \quad \& \quad [\text{rgb}(111, 0, 119)(y)]$$



Wavelength to Colour Relationship

<<https://academo.org/demos/wavelength-to-colour-relationship/>>



The colors purple [rgb(97, 0, 97)(x)] [rgb(111, 0, 119)(y)], tradition-
ally representing the 6th energy center of the human body (Third Eye,
Ajna Chakra), coincidentally aligns with the relationship

$x=y$ [380(x)] [389(y)] or otherwise

(with equivalence) $x=y: 380^\circ = 389\text{nm}$ ή 380(x) 389(y)

Another semiotic relationship $x = y$ is as follows

x Digital Root (πιθμενικός αριθμός) των λέξεων ΦΑΟΣ, ΦΩΣ 6

y 6ο ενεργειακό κέντρο σχετιζόμενο με την ενεργοποίηση της
επιφύσεως (Τρίτο Μάτι)

$x=y$ Digital Root(ΦΑΟΣ, ΦΩΣ) 6 6th energy center Ajna

Comment In mystical traditions, the activation of the pineal gland
is associated with the enlightenment of the mind and the presence of
a mystical experience †

† Hawkins, D.R. (2020) *The Map of Consciousness Explained*
A Practical Energy Science to Actualize Your Ultimate Potential [Ph.D.]
Edited by F. Grace, Carlsbad, California: Hay House

The centerpiece of the Map of Consciousness consists of the levels
themselves, along with their corresponding numerical values on the
calibrated scale of consciousness from 1 to 1,000 where 1 is exis-
tence and 1,000 is the highest level of Truth that occurs on the
planet

It is very important to remember that the calibration
figures do not represent an arithmetic but a logarithmic
progression. Thus the level 300 is not twice the amplitude
of 150. It is 300 to the 10th power 10^2 . Therefore an
increase of even a few points represents a major advance
in power: the rate of increase in power as we move up the
scale is enormous.

All levels below 200 come from force and are destructive of
life in both the individual and society at large. In contrast
all levels above 200 are constructive expressions of power.
The decisive level of 200 is the critical factor point, the
fulcrum that divides the general areas of force or false-
hood from power or truth.

Each one of these levels has its own paradigm of reality
and values that define what is acceptable within its own
domain.

Map of Consciousness®

God-view	Life-view	Level	Log	Emotion	Process
Self	Self	Enlightenment	↑ 700 1000	neffable	Pure Consciousness

ENERGY LEVELS 700-1,000 ENLIGHTENMENT The
highest level of spiritual evolution is achieved by figures
like Lord Krishna, Lord Buddha, and Lord Jesus Christ,
who transcend individual Self and ego, identifying with
Consciousness and Divinity. Their teachings elevate
humanity's awareness, offering infinite peace and grace.
At this level, the Self merges with the universal Self,
achieving non-duality and omnipresent awareness.
Enlightened individuals, often depicted with a mandala in
art, symbolize the transmission of their divine energy to
humanity. This state, exemplified by great Masters,
represents the pinnacle of human consciousness and spiri-
tual attainment. †

GREEK ALPHABET | CIRCLE | 27 LETTERS | $\Phi \Omega \Sigma$ (phôs), $\Phi \Omega \Omega \Sigma$ (phóōs), $\Phi \Lambda \Omega \Sigma$ (pháos) $\Phi \Lambda \Gamma \Omega \Sigma$ (phawos), $\Phi \Lambda \epsilon \Omega \Sigma$ (pháeos) 58

OBSERVATIONS

Continuation of Coincidence B

Epik Type	Attic Type contracted
$\Phi \Omega \Omega \Sigma$	$\Phi \Omega \Sigma$
500 70 800 200	500 800 200
→	→
"LIGHT" phôs	"LIGHT"
1570	1500

† Chang, K. F., Lesko, D. M. B., Mashburn, C., Chang, P., Tsao, F., Lind, A. J., & Diddams, S. A. 2024. A Multi-Harmonic NIR-UV Dual Comb Spectrometer. *Optics Letters* 49(7) doi:10.1364/OL.515776.

The alphanumeric equivalences of light 771 and 1500 approximately represent the range of ultraviolet radiation. In spectroscopy, light sources are divided into ultraviolet (UV) radiation (750-1500 THz), visible (400-750 THz), and NIR <400 THz. ‡

Theory of Semiotics

denotation = connotation
 $x = y$

$x = 750-1,500$ THz,
 $y = 771 (\Phi + \Omega + \Sigma)$ και $1,500 (\Phi + \Lambda + \Omega + \Sigma)$
 $x=y: 750-1,500 = 771-1,500$

Photons in the range of 750-1500 THz have enough energy to cause significant physical and chemical effects, such as ionization of atoms and molecules. ‡

† The omega of Delos, Ω in the alphabet of Thera and Cyrene is depicted as a drawing precisely as the Egyptians denote the hieroglyphic of the Sun. This letter as a phoneme is appeared in the Greek word of light, both $\Phi \Omega \Omega \Sigma$ and $\Phi \Omega \Sigma$ So, in different connotative levels, a 1 depicts the Heliocentric system in a minimal way: a dot, the Sun, and the circle define the motion of other planets around him, 2 through abstract design interrelationships, it connotes the moment that the egg or ovum fertilizes impregnates, while indicating the life-giving force of the Sun as a circular object in the celestial dome within a planetary system.

$\Phi \Omega \Omega \Sigma = \Phi \Omega \Theta \Sigma$

500	70	800	200
→			
"LIGHT" phôs			
1570			

Θ : Omega for Thera and Cyrene. Κάραλη, 2020: 190,
 Θ : Hieroglyphic for the Sun. Rogers, 2004: 110

Κάραλη, Μ., 2020, Συστήματα γραφής Writing systems, In Α. Φ. Χριστιδής, Ed., *Ιστορία της ελληνικής γλώσσας από τις αρχές έως την υστερή αρχαιότητα (History of the Greek language from the beginnings to late antiquity)* pp.184-192 (4th r. of 2nd ed.), Θεσ. νική Ινστιτούτο Νεοελληνικών Σπουδών, Ίδρυμα Μανόλη Τριανταφυλλίδη.

Rogers, H. (2005). Writing System, A linguistic approach. Victoria: Blackwell Publishing.

Within the word, if the matching of the designs of the Greek omega and the hieroglyph is sought at a connotative level based on current scientific data, the following observation arises: The alphanumeric equivalence $\Phi \Omega \Omega \Sigma$ matches the first four digits with the temperature in Kelvin of the center of the Sun.

Theory of Semiotics

denotation = connotation
 $x = y$

Williams, D. R., (1 July 2013). "Sun Fact Sheet". NASA Goddard Space Flight Center. Archived from the original on 15 July 2010. Retrieved 12 August 2013.

"SUN TEMPERATURE 15,700,000 K at the center"

$x = 15,700,000$ K,
 $y = 1,570 (\Phi + \Omega + \Omega + \Sigma)$
 $x=y: 15,700,000 \text{ K} = 1,570 (\Phi + \Omega + \Omega + \Sigma)$

1570

† When converting an astronomical unit au to a light year ly, the matching of the first two digits, 1 & 5, of the alphanumeric equivalences of the words of light, 'ΦΩΣ' 1500 and 'ΦΩΩΣ' 1570, is observed.

<https://en.wikipedia.org/wiki/Astronomical_unit>

The astronomical unit (symbol: au or AU) is a unit of length precisely equal to 149,597,870,700 meters. Historically, the astronomical unit was devised as the mean Earth-Sun distance before its modern redefinition in 2012. The AU mainly measures distances within the solar system or around other stars. It is also a fundamental measure in defining another astronomical unit of length, the parsec. ‡

† Σπυριδής, Χ.Χ., n.d., *Ερμηνεία του κανονος η νομοι των Bode Titius* [Εισήγητης Ε.Κ. Π.Α.]. National and Kapodistrian University of Athens. Available at

<http://users.uoa.gr/~hs/pyridis/nomosbode/titius.pdf>

Titius and Bode (18th century AD) used numerical sequences based on the numbers of the sacred tetractys of the Pythagoreans (6th century BC) for measuring planetary distances. This led to the discovery of the asteroid belt and the planet Uranus. Attempts to apply this law beyond the initially predicted limits pose risks of inaccuracies.

Professor Charalambos Spyridis's Department of Music Studies lecture aims to demonstrate how Titius, relying on the theories of the Harmony of the Spheres of the Pythagoreans, created the numerical series applied to the planets. Bode confirmed this Theory, reinforcing the use of the sacred tetractys numbers.

Finally, the study indicates the importance of Pythagorean philosophy and cosmology in modern science, extending research to planetary systems and their satellites. ‡

† Avery, J.S., 2016. *Science and Society*, eBook Singapore: World Scientific Publishing Company. I

Aristarchus (320-250 BC) calculated the size of the Moon by observing the shape of the Earth's shadow. From the shape of the Earth's shadow, he concluded that the Moon's diameter is about one-third of the Earth's diameter; this is approximately correct. Extending geometric calculations and observations, he attempted to calculate the distance between the Sun and the Earth, proposing the heliocentric system.

In his calculation, he concluded that the Sun is about twenty times farther from the Earth than the Moon, while it is about four hundred times farther. ‡

† A light year, also written as a light year ly, is a unit of length used to express astronomical distances and is precisely equal to 9,460,730,472,580.8 kilometers, approximately 5.88 trillion miles.

According to the International Astronomical Union' (IAU) definition, a light year is the distance that light travels in a vacuum in one Julian year (365.25 days). It's important to note that, despite its name, a light year is not a unit of time. This common misconception often leads to a deeper understanding of this astronomical unit.

The light year, a unit most commonly used in professional astronomy, also finds practical use in non-specialist contexts and scientific journalism publications. It's a convenient way to express distances to stars and other galactic-scale distances, making it a relevant concept in our everyday understanding of the universe. The unit most commonly used in professional astronomy is the parsec (symbol pc, approximately 3.26 light years). ‡

General information

Unit system	Astronomical system of units
unit of	length
Symbol	au or AU

Conversions

metric (SI) units	1.495978707×10 ¹¹ m
imperial & US units	9.2956×10 ⁷ mi
astronomical units	4.8481×10 ⁻⁶ pc
	1.5813×10 ⁻⁵ ly
	215.03 R _⊙

Wikipedia and Astronomical unit [online] Available at: https://en.wikipedia.org/wiki/Astronomical_unit

Theory of Semiotics

denotation = connotation
 $x = y$

$x = 1.5813 \times 10^{-5}$ ly,
 $y = 1,570 (\Phi + \Omega + \Omega + \Sigma)$ 1,500 ($\Phi + \Omega + \Sigma$)
 $x=y: 1.5813 \times 10^{-5}$ ly = 1,570, 1,500

1 5
1+5=6

† The correlations of frequencies with alphanumeric values were carried out within the framework of observations and investigations through a contemporary scientific lens. Since today's technological means did not exist in ancient times, aren't they?, these correlations are neither valid nor accurate. Since conventional history cannot substantiate my observations, I am compelled to begin the creation of a new language. I started with an instinct to observe, think, and imagine worlds that form words, and I arrived at everything you now see.

Creating, like a palace of thought, beyond physical space. Moving mentally along tree-like structures within an imaginary space that stored information, I extracted the observations and now present them to you.

As I mentioned before, the observations aim to lay the foundations for the beginning of a new language for a potentially new human species more evolved than Homo sapiens. I call this new species Homo-Cycreasol, super-entities that can transfer their consciousnesses, having decoded all the "secrets" of existence. During verbal communication, they interact at different frequency levels beyond human capabilities.

During written communication, the syntagms (words) are structured based on discoveries, conventional metric sizes, and other information about the elements they deal with each time. It is a natural trace of an interstellar hyperdimensional civilization, freed from fragile and imperfect humanity with limited capabilities. Within this framework, I would say that the observations are a primitive intuitive effort to lay the foundation of a new language that I estimate could start in our 21st century. Over time, I hope that an Artificial Superintelligence singularity, which I name as AI Deost (a neologism based on the 23 Latin letters), will support the creation of the new language through enhanced and complex correlations, serving Homo-Cycreasol. Another example of semiotic coding could be found in the planets of our solar system, based on some of their characteristics derived from philosophical texts, as presented below in the following observation.

Music of the Celestial Spheres Musica universalis

Octave name	Octave name	Do	Do#	Re	Re#	Mi	Fa	Fa#	Sol	Sol#	La	La#	Ti
Frequency (Hz)	Frequency (Hz)	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
Σζυνολικά Τόνους: 201.1.1, από 16 Γαλλικά Νότια (A Musical Note) 2023	Subcontra (Hz)											A0 ~28	B0 ~31
	Contra (Hz)	C1 ~33	C#1 ~35	D1 ~37	D#1 ~39	E1 ~41	F1 ~44	F#1 ~46	G1 ~49	G#1 ~52	A1 ~55	A#1 ~58	B1 ~62
	Great (Hz)	C2 ~66	C#2 ~69	D2 ~73	D#2 ~78	E2 ~82	F2 ~87	F#2 ~92	G2 ~98	G#2 ~104	A2 110	A#2 ~117	B2 ~123
	Small (Hz)	C3 ~131	C#3 ~139	D3 ~147	D#3 ~156	E3 ~165	F3 ~175	F#3 ~185	G3 ~196	G#3 ~208	A3 220	A#3 ~233	B3 ~247
	One-lined (Hz)	C4 ~262	C#4 ~277	D4 ~294	D#4 ~311	E4 ~330	F4 ~349	F#4 ~370	G4 ~392	G#4 ~415	A4 440	A#4 ~466	B4 ~494
	Two-lined (Hz)	C5 ~523	C#5 ~554	D5 ~587	D#5 ~622	E5 ~659	F5 ~698	F#5 ~740	G5 ~784	G#5 ~831	A5 880	A#5 ~932	B5 ~988
	Three-lined (Hz)	C6 ~1047	C#6 ~1109	D6 ~1175	D#6 ~1245	E6 ~1319	F6 ~1397	F#6 ~1480	G6 ~1568	G#6 ~1661	A6 1760	A#6 ~1866	B6 ~1976
	Four-lined (Hz)	C7 ~2093	C#7 ~2217	D7 ~2349	D#7 ~2489	E7 ~2637	F7 ~2794	F#7 ~2960	G7 ~3136	G#7 ~3322	A7 3520	A#7 ~3729	B7 ~3951
	Five-lined (Hz)	C8 ~4186	C#8 ~4435	D8 ~4699	D#8 ~4978	E8 ~5274	F8 ~5588	F#8 ~5920	G8 ~6272	G#8 ~6645	A8 7040	A#8 ~7459	B8 ~7902

Planets	Saturn	Jupiter	Mars	Sun	Mercury	Venus	Moon
Πλανήτες	Κρόνος Φρόνος	Δίας	Αρης	Ήλιος Αέλιος	Ερμής	Αφροδίτη	Σελήνη
Word Value (Greek)	510 580	215	309	318 316	353	993	301
Ancient Greek astronomers philosophers musicians Σπυρίδης, n.d. σ 11	Notes	paraneta	parhypata	archanos	mesa	paraneta	trita sinnummenon
	string	C	F	G	A	C	D
According to Pythagoras (Proust, 2011, σ 358)	Notes	B	C	D	E	F	G
Nicomachus of Gerasa Manus of Harmony (Proust, 2011, σ 359)	string	nypata	parhypata	hypermesa	mesa	trita	paraneta
	sound wave	semi tone	tone	tone	tone	semi tone	tone

REFERENCE

Proust, D. (2009). *The Harmony of the Spheres from Pythagoras to Voyager*. Proceedings of the International Astronomical Union, 5 S260, pp 358–367. doi: 10.1017/s1743921311002535 [online] Available at: <https://articles.adsabs.harvard.edu/full/2011IAUS.260.358P/0000358.000.html> [Accessed 6 Nov. 2020].

Σπυρίδης, Χ. n.d., *Η μουσική των σφαιρών των Πυθαγορείων* [online]. Available at: <http://users.uoa.gr/~hspyridis/kallipateira.pdf> [Accessed 17 Jan. 2023].

Szynalski (2011). Online Tone Generator - generate pure tones of any frequency. [online]. Available at: <https://www.szynalski.com/tone-generator/> [Accessed 17 Jan. 2023].

Solar System

A beautiful coincidence

Η Λ Ι Ο Σ
8 30 10 70 200
" SUN "
318
E4 ~330Hz

Κ Ρ Ο Ν Ο Σ
20 100 70 50 70 200
" SATURN "
510
C5 ~523 Hz

Ε Ρ Μ Η Σ
5 100 40 8 200
" MERCURY "
353
F4 (349.23)Hz

Σ Ε Λ Η Ν Η
200 5 30 8 50 8
" THE MOON "
301
D4= ~294Hz

Observations from my research 2021-2024: Coincidental Matching of the numerical values of the Greek words SUN, MERCURY, MOON, & SATURN with the frequencies of each note from the literature.

According to the literature studies cited here, each planet is identified with a note. These planets are considered to produce the so-called Music of the Celestial Spheres. Ancient texts document the association of notes with the planet.

GREEK ALPHABET | CIRCLE | 27 LETTERS | observation

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Sound Greek Alphabet
[Drawing Observation]
Athens Greece

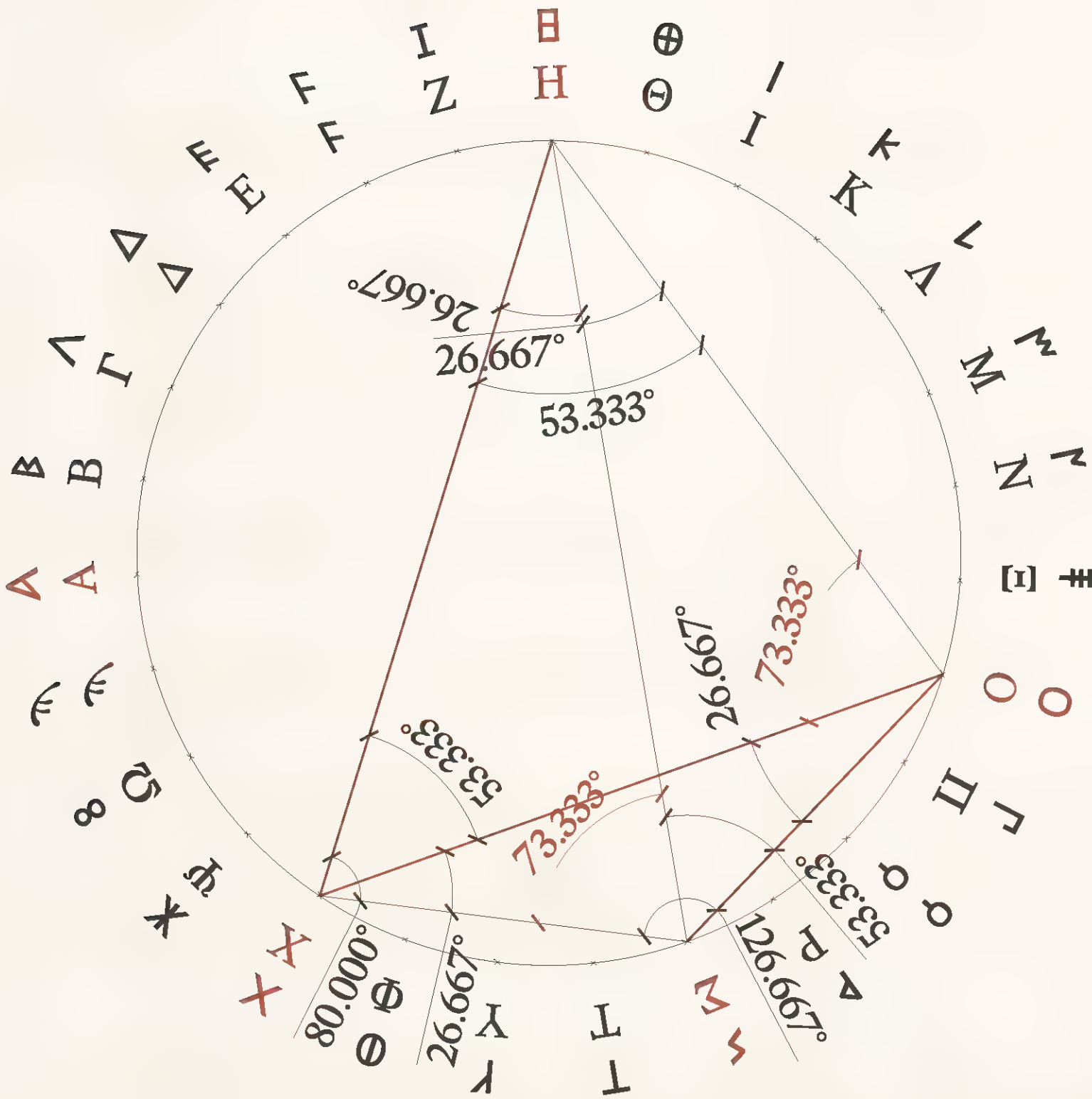
Ancient Greek

ΗΧΟΣ

(ixos)

English

SOUND



Exact values

Celsius temperature θ (°C)	Speed of sound c (m/s)	Speed of sound c (mi/s)	Speed of sound c (km/h)	Speed of sound c (mph)
35	351.88	0.2186481	1,266.768	787.13314245
-25	315.77	0.19621038	1,136.772	706.35737294

Wikipedia, (n.d). Speed of sound [online] Available at https://en.wikipedia.org/wiki/Speed_of_sound

The number 10 is taken as a semiotic and mathematical tool for philosophical and geometric investigation, as in the 3rd book (III, 1, 5-6) "On Architecture" (30–20 BC), the Latin Marcus Vitruvius Pollio (Roman architect and engineer), mentions:
(DOI: 10.4159/DLCL.vitruvius-architecture.1931): "Now the ancients determined as perfect the number which is called ten. 1 For from the hands they took the number of the inches; from the palm, the foot was discovered. Now while in the two palms with their fingers, ten inches are naturally complete, Plato considered that number perfect, for the reason that from the individual things which are called monades among the Greeks, the decad 2 is perfected."

A beautiful coincidence:

Theory of Semiotics
denotation = connotation
 $x = y$

Vitruvius, *de Architectura* [III, I, 5]

733.3333334° = If I multiply it by 10, then: 733.3333334
733.3333334 = 733.3333334 mph

Celsius temperature θ (°C)	Speed of sound c (m/s)	Speed of sound c (mi/s)	Speed of sound c (km/h)	Speed of sound c (mph)
35	351.88	0.2186481	1,266.76	787.13314245
20	343.21		8	
-5.685	327.829333	0.19621038		733.3333334
-25	315.77		1,136.772	706.35737294

HEBREW ALPHABET | CIRCLE | 22 LETTERS |

Hebrew

קול

English

SOUND

Exact values

Celsius temperature θ (°C)	Speed of sound c (m/s)	Speed of sound c (mi/s)	Speed of sound c (km/h)	Speed of sound c (mph)
35	351.88	0.2186481	1,266.768	787.13314245
-25	315.77	0.19621038	1,136.772	706.35737294

Wikipedia [nd] Speed of sound [online] Available at: https://en.wikipedia.org/wiki/Speed_of_sound

The number 10 is not just a number in Jewish tradition, but a symbol of profound significance, appearing in key religious and mystical contexts. It represents the Ten Commandments (Aseret HaDibrot, Exodus 20), the Ten Plagues of Egypt (Eser Makkot, Exodus 7–12), and the ten divine utterances (Mishna, Pirkei Avot 5:1) through which God created the world. In Kabbalah, the Ten Sefirot outline divine emanations, each representing a different aspect of God's divine nature (Sefer Yetzirah). A minyan, the quorum for Jewish prayer, requires ten men, symbolizing the strength and unity of a community (Talmud, Berakhot 21b). Abraham faced ten trials (Pirkei Avot 5:3) as a test of faith, each one symbolizing a different aspect of his faith and commitment. Additionally, Jewish law mandates a tithe (10%) of earnings for charity, symbolizing the importance of giving back to the community (the concept originates in Genesis 28:22). The number also marks ten generations from Adam to Noah and Noah to Abraham (Genesis 5, 11), reinforcing its profound symbolic and structural role in Jewish thought.

A beautiful coincidence:

Theory of Semiotics

denotation = connotation

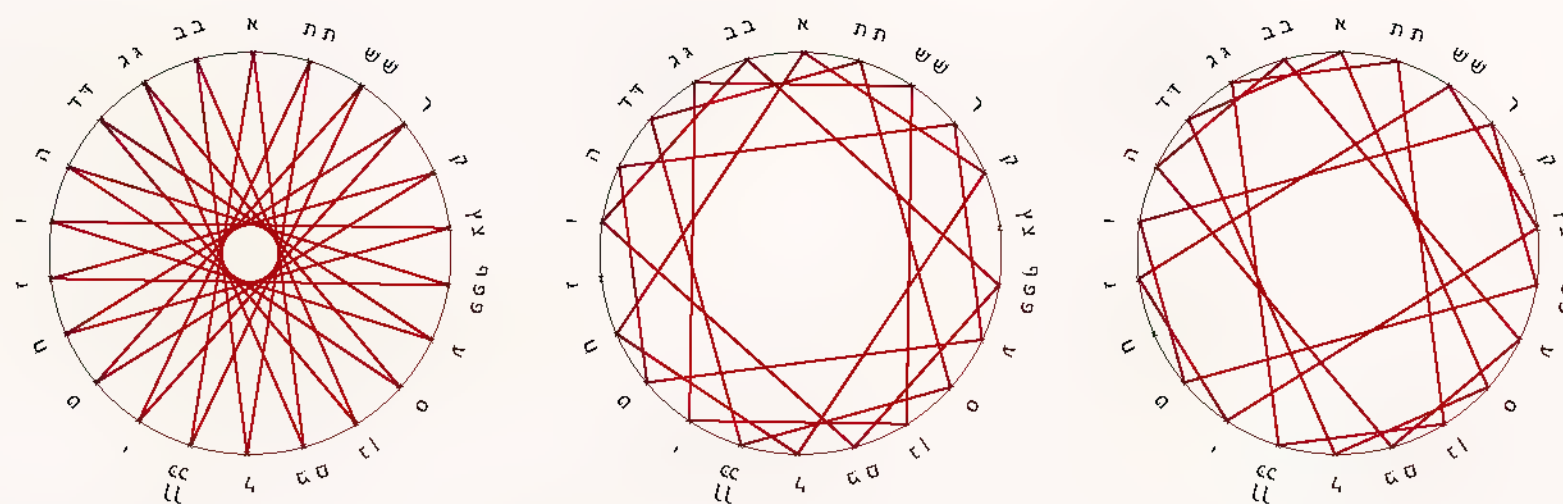
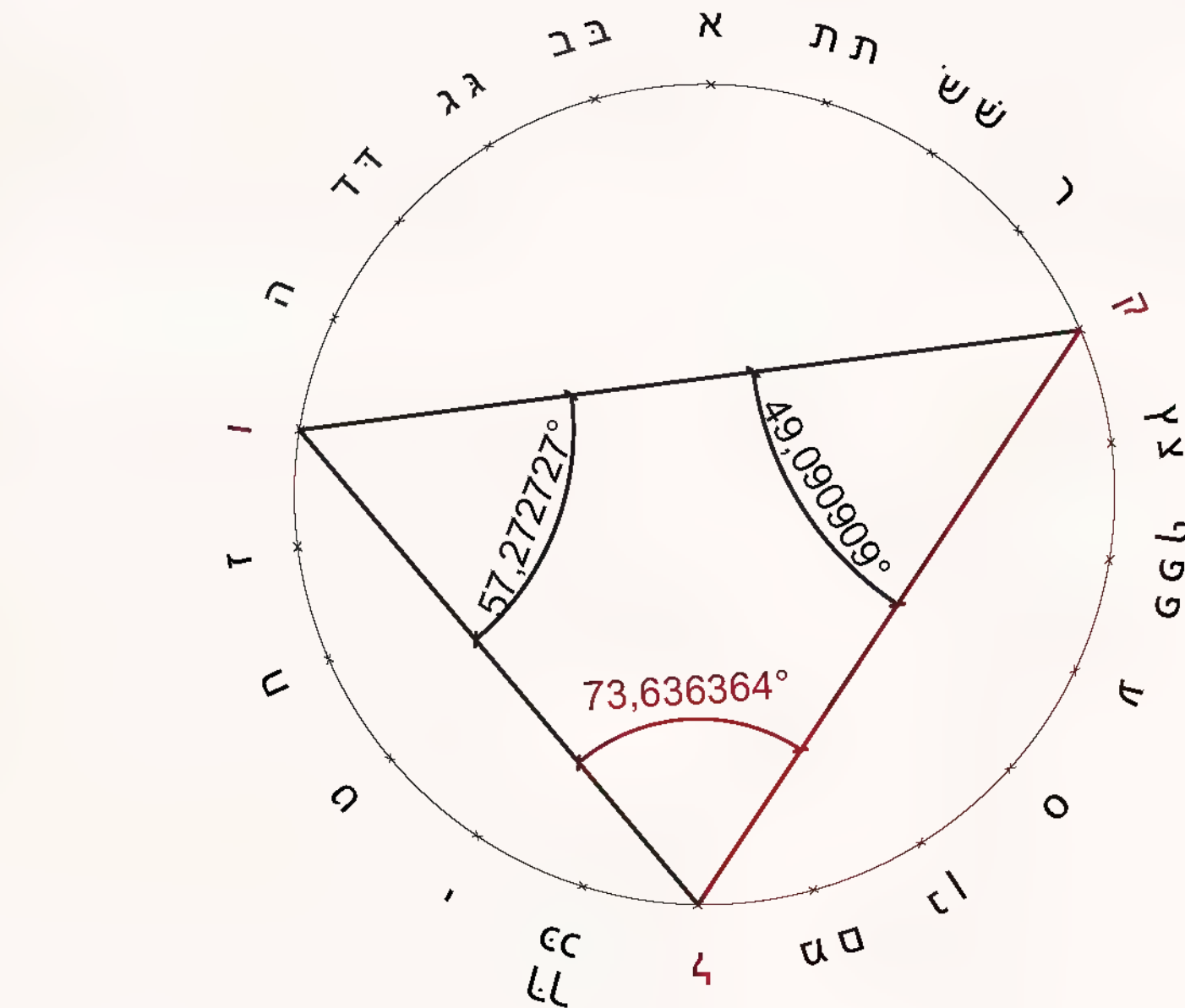
$x = y$

73.63636364° = If I multiply it by 10, then, 733.3333334

733.3333334 = **736.3636364 mph**

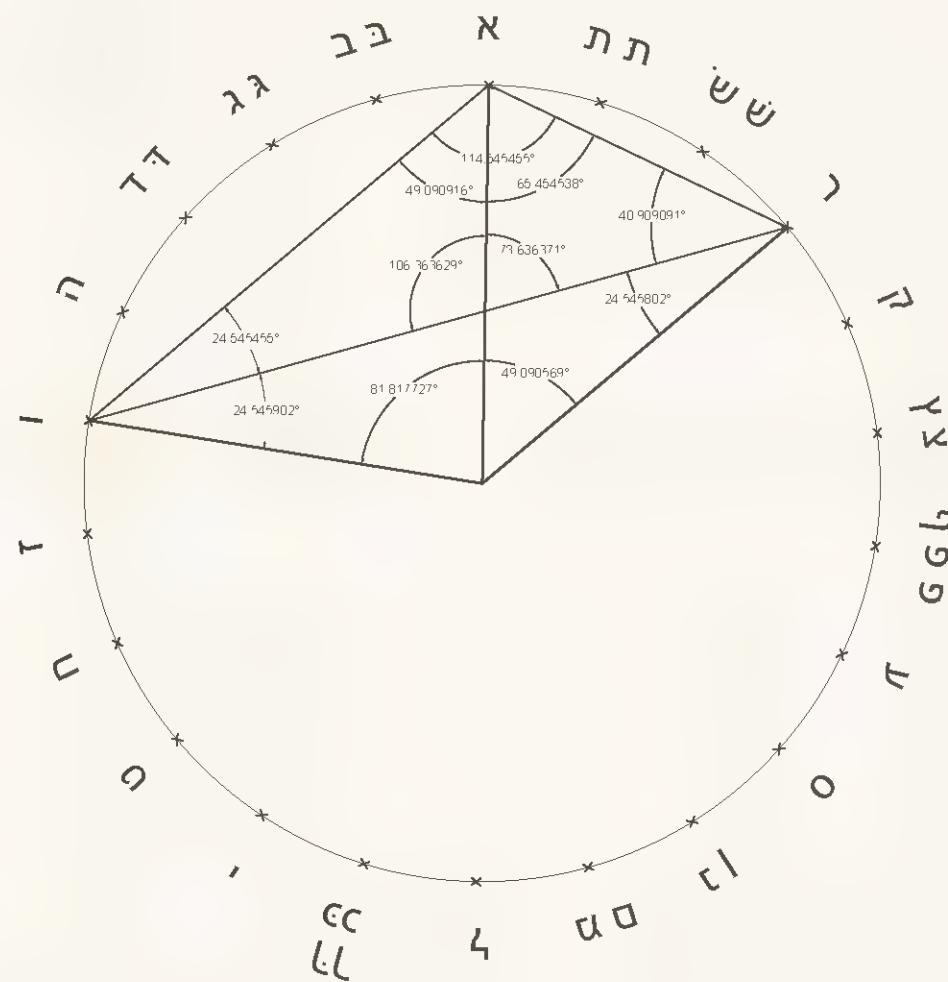
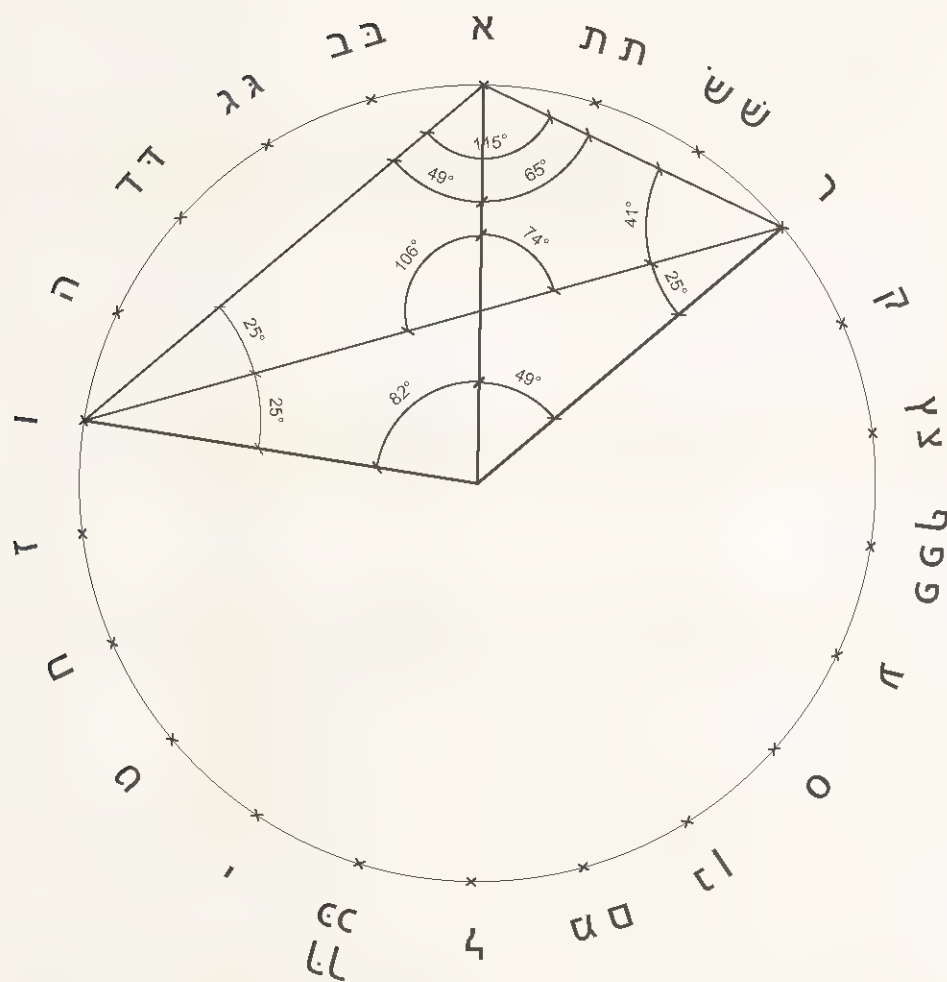
Celsius temperature θ (°C)	Speed of sound c (m/s)	Speed of sound c (mi/s)	Speed of sound c (km/h)	Speed of sound c (mph)
35	351.88	0.2186481	1,266.768	787.13314245
20	343.21			
-2.71	329.184	0.2045455	1,185.062	736.3636364
-25	315.77	0.19621038	1,136.772	706.35737294

Linear
Interpolation



HEBREW ALPHABET | CIRCLE | 22 LETTERS † |

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 L'qnt Hebrew Alphabet
 [Drawing Observation]
 Athens, Greece
observation



Observation
 Beautiful coincidences:

Theory of Semiotics
 denotation = connotation
 $x = y$

From the process of unlimited semiosis:

1st: X	X	Y	Y
8.181818°	106.363629°	8.181818	106.363629
8.181818°	24.545902°	8.181818	24.545902
32.727273°	40.909091°	32.727273	40.909091
24.545455°	65.454538°	147.272727	49.090916
147.272727°	49.090916°	24.545455	114.545455
24.545455°	114.545455°	24.545455	98.181811
24.545455°	98.181811°	130.908295	81.818189
130.908295°	81.817272°	49.090569	122.727273
49.090569°	122.727273°	73.636371	
73.636371°			

From the process of unlimited semiosis (Peircian Semiotics):

1st: $114.545455 + 98.181811 + 81.818189 + (8.181818/2) + (8.181818/7) = 299.8051951428571$

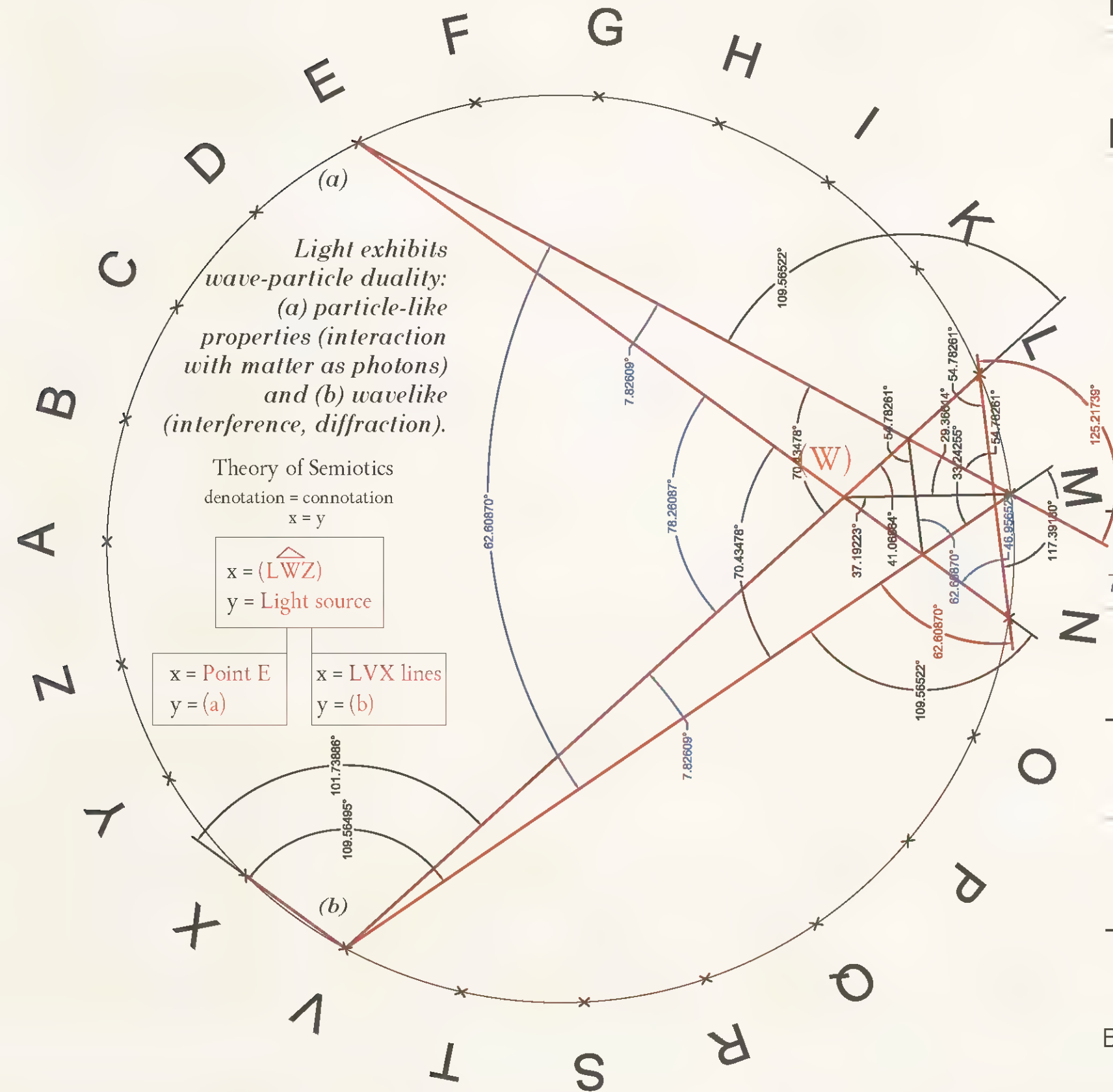
Adonai (name of God in the Bible) = ה'אדני = 65: Digital Root of 'Adonai,' 65 = 2
 Sod (secret) = דוס = 70: Digital Root of 'Sod, 70' = 7

2nd: $x = 299.8051951428571,$
 $y = 299,792,458 \text{ m/s (speed of light)}$
 $x=y: 299.8051951428571 = 299,792,458 \text{ m/s}$

† The two Hebrew words Yayin, meaning "wine" (10 יין 10 50 Yayin 70), and Sod, meaning "secret" 60 סוד 6 4 Sod 70), both bear the number 70 in the normal Hebrew alphabetic numerals. This intriguing numerical connection has led some rabbis to bring these words together in a thought-provoking phrase: Nichnas Yayin Yatsa Sod, which translates to "the secret comes out of the wine" (Latin: in vino veritas, the drunken man tells all). (Ifrah, 2000, page 253) (Ifrah, 2000, page 253) I attempted to delve into the spiritual dimension of the word 'Sod,' particularly to explore the word "secret" ('Sod') itself with light. The result is a refined dimension of correlation with a "geometric spirituality." ‡

LATIN ALPHABET | CIRCLE | 23 LETTERS † |

observation



LATIN

LVMEN (lūmĕn), LVX (lux)

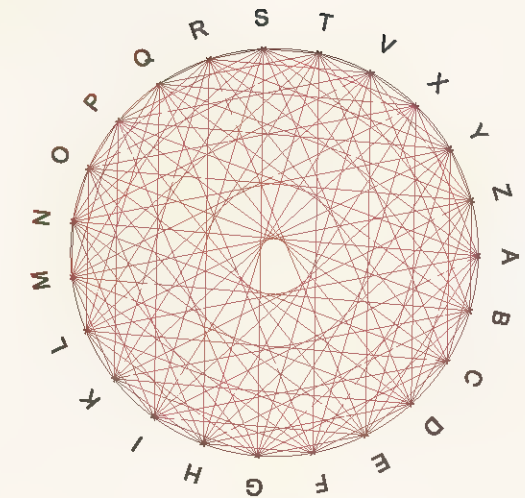
English

LIGHT

Exact values

metres per second	299,792,458
Approximate values (to three significant digits)	
kilometres per hour	1,080,000,000
miles per second	186 282.397
miles per hour	671,000,000
astronomical units per day	173
parsecs per year	0.307

Wikipedia 2019 Speed of light [online] Available at: https://en.wikipedia.org/wiki/Speed_of_light [Accessed 10 Jun 2023]



$$125.21739^\circ + 62.6087^\circ = 187.82609^\circ$$

$$7.8261^\circ + 7.8261^\circ + 62.6087^\circ + 78.2609^\circ + 29.36614^\circ = 185.88793^\circ$$

$$187.82609^\circ + 185.88793^\circ = 373.71402^\circ$$

$$\text{Average} = \frac{\text{Sum}}{\text{Count}} = \frac{373.71402^\circ}{2} = 186.85701^\circ$$

$$70.43478^\circ + 101.73886^\circ = 172.1736^\circ$$

$$33.24255^\circ + 62.6087^\circ + 70.43478^\circ + 7.82609^\circ = 174.11212^\circ$$

$$174.11212^\circ + 172.1736^\circ = 346.28572^\circ$$

$$\text{Average} = \frac{\text{Sum}}{\text{Count}} = \frac{346.28572^\circ}{2} = 173.14286^\circ$$

$$x = 186,85701^\circ$$

$$y = 186\,282.397 \text{ miles per second}$$

Observation
Beautiful coincidences:

$$x = 173.14286^\circ$$

Theory of Semiotics
denotation = connotation
 $x = y$

Observations: The first 3
numbers are equal.

$$y = 173.144632674(3) \text{ AU/day}$$

$$\text{light time for unit distance: } t_{\text{light}} = 499.004783836(10) \text{ s}$$

$$c = 0.00200398880410(4) \text{ AU/s} = 173.144632674(3) \text{ AU/day}$$

† Ifrah, Georges (2000). *The Universal History of Numbers from Prehistory to The Invention of The Computer* (D. Bellos, E. F. Harding, S. Wood & I. Monk, Trans.). (p. 226). New York: John Wiley & Sons.
23 latin letters: Numeral alphabet used by some mediaeval and Renaissance mystics. This adaptation of the Greek system to the Latin alphabet is described by A. Kircher in *Oedipus Aegyptiacus*, vol. II/1, p. 488 (1653).

observation
© Petrakis Petros, 2021-23,
Light, Arab Alphabet
Design, Observatory
Athens, Greece



النور

English

THE LIGHT

Geometry, Observation

Isosceles Trapezoid

Isosceles Triangle

observation



النور

English

THE LIGHT

$$96,4286^{\circ} + 45^{\circ} + 45^{\circ} = 186,43286^{\circ}$$

Theory of Semiotics
denotation - connotation
x - y

$x = 186,43286^\circ$,
 $y = 186\,282.397$ miles per second (speed of light)
 $x=y: 299.8051951428571 = 299,792,458$ m/s

Open at on: The first 3 numbers are equal.

Observation Vol. 1

Interrelation between Number Theory, Geometry & Numerology of ancient times

Latin, Hebrew, Greek, English and Arab civilizations

Word “Angle” © Petrakis, Petros (Architect - Engineer)
27/12/2022, [Observation] Athens, Greece.

Ifrah, Georges (2000). *The Universal History of Numbers—from Prehistory to The Invention of The Computer*
(D. Bellos, E. F. Harding, S. Wood & I. Monk, Trans.). New York: John Wiley & Sons.

Gematrix. (n.d.). *Gematria Explanations*. [online] Available at:
https://www.gematrix.org/gematria/#latin_gematria [Accessed Dec. 2022].

“Numeral alphabet used by some
mediaeval and Renaissance
mystics. This adaptation of the
Greek system to the Latin
alphabet is described by
A. Kircher in *Oedipi Aegyptiaci*,
vol. II/1, p. 488 (1653)”

“The numerical
evaluation of
Hebraic letters are
used by rabbis and
Cabbalists for the
interpretation of
their homilies.”

“The Greek alphabetic
system is
documented by a
papyrus (Inv. 65 445)
in the Cairo museum
and dates to the 3rd
century BC.”

“It is well known and its use
has been documented well
back into the medieval period.
One such example is a poem
coming from a manuscript in
the collection of Balliol
College, Oxford (1).”

“The order of Arabic
letters as ordained
according to the regular
development of the
values of the alphabetic
number system of eastern
Arabs. Abjad numerals”

Latin
A N G V L V S
1 40 7 200 20 200 90
“ ANGLE ”
Digital Root
558
5+5+8
18
1+8
9

Hebrew
א נ ו ל ו ש
7 6 10 400
“ ANGLE ”
Digital Root
423
4+2+3
9

Greek
Α 8 Μ Ι Α
3 800 50 10 1
“ ANGLE ”
Digital Root
864
8+6+4
18
1+8
9

English
A N G L E
6 84 42 72 30
“ ANGLE ”
Digital Root
234
2+3+4
9

Arabic
ز ا و ي ة
5 10 6 1 7
“ ANGLE ”
Digital Root
27
2+7
9

Formula for the **Sum of Interior Angles** of a Polygon with
n sides (regular n-gon): $((2 \times n) - 4) \times 90$

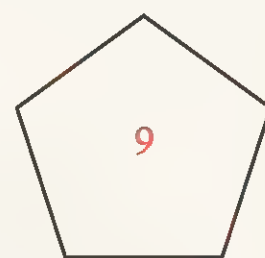
Digital Root of $((4 \times n) - 2) \times 90 : 9$



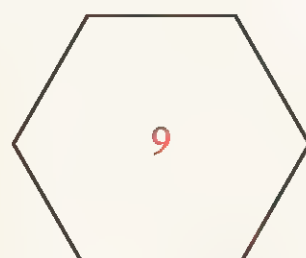
180°
1+8+0
9



360°
3+6+0
9



720°
7+2+0
9



1440°
1+4+4+0
9

Observation: Digital roots of the word “angle” of five civilizations and the sum of angles of polygons appear to be associated by chance. Additionally, it is a fact that each corner drawn on the paper can be enclosed within any regular polygon. Thus, Number Theory, Geometry & Numerology of ancient times seem to have a correlation as a beautiful coincidence. ‡

Observation Vol. 2

Interrelation between Number Theory, Geometry & Numerology of ancient times

Latin, Hebrew, Greek, English and Arab civilizations

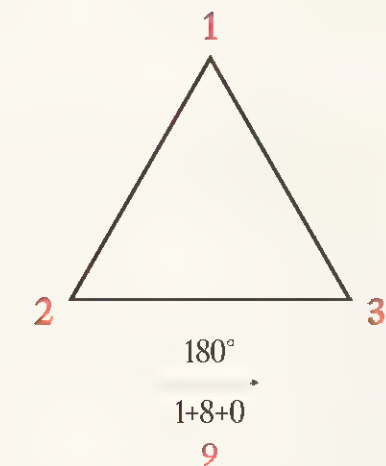
Word “Triangle” © Petrakis, Petros (Architect - Engineer)
27/12/2022, [Observation] Athens, Greece.

Etymology
trēs (“three”) + angulus (“corner, angle”)
Latin
T R I A N G V L V M
100 80 9 1 40 7 200 20 200 30
“ ANGLE ”
Digital Root
687
6+8+7
21
2+1
3

Hebrew
מ ש ו ל ש
40 300 6 30 300
“ ANGLE ”
Digital Root
676
6x7x6
252
2+5+2
3

Etymology
trēs (“three”) + angulus (“corner, angle”)
English
T R I A N G L E
120 108 54 6 84 42 72 30
“ ANGLE ”
Digital Root
516
5+1+6
12
1+2
3

The Triangle has 3 corners.



Etymology
τρεις (“three”) + γωνία (“corner, angle”)
Greek
Τ Ρ Ι Α Ν Γ Ο Ν
300 100 10 3 800 50 -
“ ANGLE ”
Digital Root
1263
1+2+6+3
12
1+2
3

Arabic
م ث ل ث
500 30 500 40
“ ANGLE ”
Digital Root
1070
5x3x5x4
300
3+0+0
3

Observation: Digital roots of the word “triangle” of five civilizations and the sum of angles of polygons appear to be associated by chance. Additionally, it is a fact that the triangle has 3 corners. Thus, Number Theory, Geometry & Numerology of ancient times seem to have a correlation as a beautiful coincidence. The peculiarity of multiplication appears in rabbis and Cabbalists for the interpretation of their homilies. Because of the typical approach to operations, it was considered standard for the rest. ‡

Exploring the Greek word for 'GOD' (= "Θ Ε Ο Σ")

OBSERVATIONS

Observing through the lens of the architect. The word God, according to the Greeks in ancient times, was a clever assembly of some mathematical law encoded through the letters in the word "ΘΕΟΣ." The ancient Greek sophist Protagoras, when asked to state his opinion on the existence of the gods, gave the following answer *On the Gods*, he wrote

"Concerning the gods, I have no means of knowing whether they exist or not nor of what sort they may be because of the obscurity of the subject and the brevity of human life"

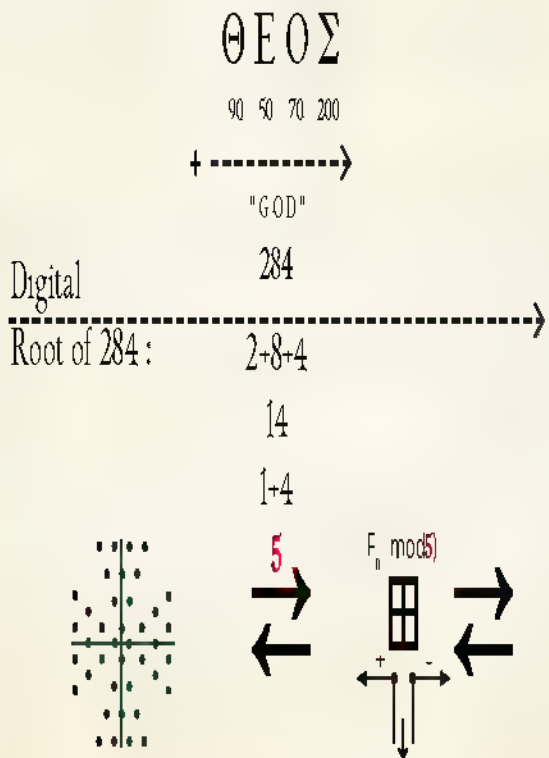
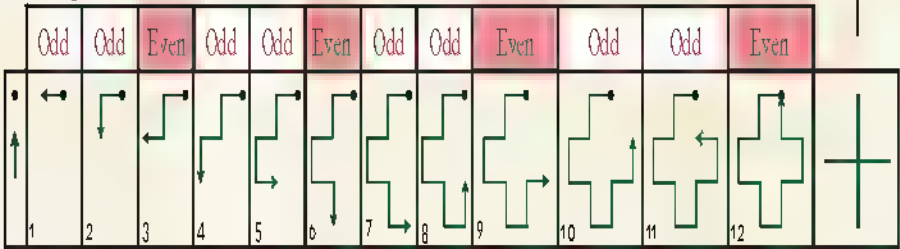
Remember that before the creation of letters, Geometric art phase of Greek art 900 to 700 BC, primarily characterized by geometric motifs, had intervened with designing patterns that, according to numerology, the patterns of all nature arise mainly from periodic arithmetical sequences. Letters seem to be the result of grammatical design rules. Read the following example—a correlation with modern numbers which can be replaced with the ancient metric system—music, and design art

	Lucas Sequence $L_n \pmod{2}$, $L_0 = L_1 = 1$, $L_n = L_{n-1} + L_{n-2}$, $L_1 = L_2 = 1$, $L_0 = 0$, $n = N^* = 1, 2, 3, \dots$															
	Fibonacci Sequence $F_n \pmod{2}$, $F_n = F_{n-1} + F_{n-2}$, $F_1 = F_2 = 1$, $F_0 = 0$, $n = N^* = 1, 2, 3, \dots$															
	Dactylic Hexameter is an important meter in Greek and Latin poetry.															
0 = —	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1 = ∪	∪	∪	∪	∪	∪	∪	∪	∪	∪	∪	∪	∪	∪	∪	∪	∪
	Even	Odd	Odd	Even	Odd	Odd	Even	Odd	Odd	Even	Odd	Odd	Even	Odd	Odd	Even

Fibonacci Sequence $F_n \pmod{10}$, $\{F_n\}^* = F_n = F_{n-1} + F_{n-2}$, $F_1 = F_2 = 1$, $F_0 = 0$, $n = N^* = 1, 2, 3, \dots, 1000000000$															
Even	Odd	Odd	Even	Odd	Odd	Even	Odd	Odd	Even	Odd	Odd	Even	Odd	Odd	Even
0	1	1	2	3	5	8	3	1	4	5	9	4	3	7	
0	7	7	4	1	5	6	1	7	8	5	3	8	1	9	
0	9	9	8	7	5	2	7	9	6	5	1	6	7	3	
0	3	3	6	9	5	4	9	3	2	5	7	2	9	1	



Design Machine

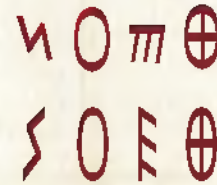


$F_n \pmod{5}$, $F_n = F_{n-1} + F_{n-2}$, $F_1 = F_2 = 1$, $F_0 = 0$, $n = N^* = 1, 2, 3, \dots$	0	1	2	3
	0	3	3	4
	0	4	4	3
	0	2	2	1
SUM	40			

Exploring the Greek word for 'GOD' (= "Θ Ε Ο Σ")

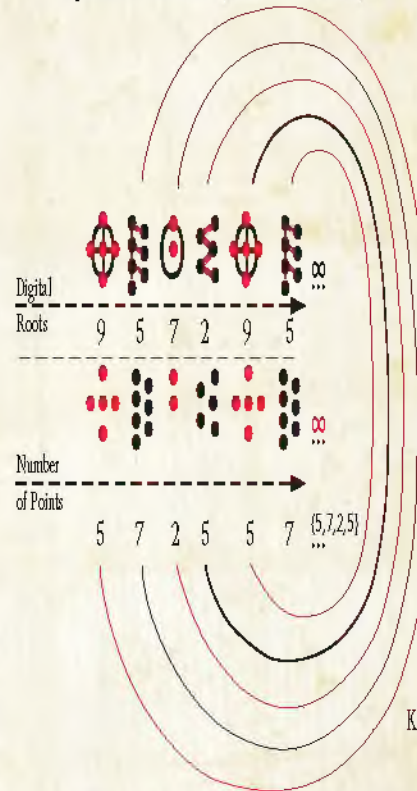
OBSERVATIONS

"The Fibonacci sequence turns out to be the key to understanding how nature designs... and is... a part of the same ubiquitous music of the spheres that builds harmony into atoms, molecules, crystals, shells, suns and galaxies and makes the Universe sing."
-Guy Murchie



Sigma Omikron Epsilon Theta

Each preceding letter, through the number of its points, which generates the base number of the following letter, creates a new letter until it returns to the first letter. This state continues ad infinitum. The mathematical investigations conducted on the left limit the range of letter choices. Thus, the appropriate design (graph or letter) is selected each time based on the first design principle of the infinite repetition of the word (as illustrated below).



Design	Omikron	Epsilon	Theta	Letter
Σ	Ο	Ε	Θ	N Semite
Σ	Ο	Ε	Θ	Alecia, Sigeon
Σ	Ο	Ε	Θ	Eubala
Σ	Ο	Ε	Θ	Borotia
Σ	Ο	Ε	Θ	Thessaly
Σ	Ο	Ε	Θ	Phokis
Σ	Ο	Ε	Θ	Lokides and colonies
Σ	Ο	Ε	Θ	Agrina, Kiklona
Σ	Ο	Ε	Θ	Corinth, Korkyra
Σ	Ο	Ε	Θ	Myra, Elythion
Σ	Ο	Ε	Θ	Sigon
Σ	Ο	Ε	Θ	Pelous, Kionan, Iryra
Σ	Ο	Ε	Θ	Argos, Mycenae
Σ	Ο	Ε	Θ	Eastern Argolid
Σ	Ο	Ε	Θ	Lakonia, Messena, Sparta
Σ	Ο	Ε	Θ	Arkadia
Σ	Ο	Ε	Θ	Elik
Σ	Ο	Ε	Θ	Achaia and colonies
Σ	Ο	Ε	Θ	Attika, Epeiros
Σ	Ο	Ε	Θ	Rhodes, Kephallenia
Σ	Ο	Ε	Θ	Euboe N. colonis
Σ	Ο	Ε	Θ	Syracuse and colonies
Σ	Ο	Ε	Θ	Megara Hyblina, Selinous
Σ	Ο	Ε	Θ	Naxos, Amorgos
Σ	Ο	Ε	Θ	Paros, Thos
Σ	Ο	Ε	Θ	Delos, Rhos, Ios
Σ	Ο	Ε	Θ	Crete
Σ	Ο	Ε	Θ	Thera, Kyrene
Σ	Ο	Ε	Θ	Melos, Sikinos, Anaphe
Σ	Ο	Ε	Θ	Iane, Dodekanisos and colonies
Σ	Ο	Ε	Θ	Rhodes, Gela, Ikaros
Σ	Ο	Ε	Θ	Knidos
Σ	Ο	Ε	Θ	Aiolia

Karantzola, E. (n.d.). Open eClass - Univ. of the Aegean | Συστήματα Γραφής στο Μεσογειακό - Ενότητα 6: Αλφαριθμητική γραφή [=Writing Systems in Mediterranean - Unit 6: Alphabetic Writing], p. 15. Available at:

REFERENCE: Generalizations of Fibonacci numbers. [online]. Available at: https://en.wikipedia.org/wiki/Generalizations_of_Fibonacci_numbers. [Accessed 27 Jan. 2023].

A different generalization of the Fibonacci sequence is the Lucas sequences of the kind defined as follows:

$$U(0)=0, U(1)=1, U(r+2)=PU(r+1)-QU(r),$$

where the normal Fibonacci sequence is the special case of $P=1$ and $Q=-1$. Another kind of Lucas sequence begins with $V(0)=2, V(1)=P$. Such sequences have applications in number theory and primality proving.

When $Q=-1$, this sequence is called **P-Fibonacci** sequence, for example, Pell sequence is also called **2-Fibonacci** sequence.

The **3-Fibonacci** sequence is

0, 1, 3, 10, 33, 109, 360, 1189, 3927, 12970, 42837, 141481, 467280, 1543321, 5097243, 16835050, 55602393, 183642229, 606529080, ... (sequence A006190 in the On-Line Encyclopedia of Integer Sequences [OEIS])

3-Fibonacci sequence (mod 2): [0,1] → It is illustrated by the transition from simple points to complex structures

Design Machine of 3-Fibonacci sequence (Point Grammar): [Even, Odd, Odd]

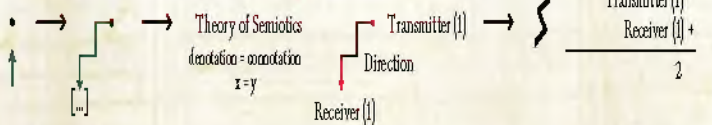


The **4-Fibonacci** sequence is

0, 1, 4, 17, 72, 305, 1292, 5473, 23184, 98209, 416020, 1762289, 7465176, 31622993, 133957148, 567451585, 2403763488, ... (sequence A001076 in the OEIS)

4-Fibonacci sequence (mod 2): [0,1]

Design Machine of 4-Fibonacci sequence (Point Grammar): [Even, Odd]

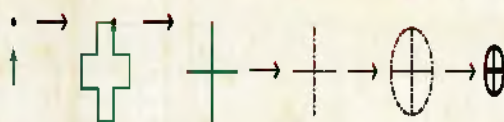


The **5-Fibonacci** sequence is

0, 1, 5, 26, 135, 701, 3640, 18901, 98145, 509626, 2646275, 13741001, 71351280, 370497401, 1923838285, 9989688826, ... (sequence A052918 in the OEIS)

5-Fibonacci sequence (mod 2): [0,1]

Design Machine of 5-Fibonacci sequence (Point Grammar): [Even, Odd, Odd]



The **6-Fibonacci** sequence is

0, 1, 6, 37, 228, 1405, 8658, 53353, 328776, 2026009, 12484830, 76934989, 474094764, 2921503573, 18003116202, ... (sequence A005668 in the OEIS)

6-Fibonacci sequence (mod 2): [0,1]

Design Machine of 6-Fibonacci sequence (Point Grammar): [Even, Odd]



The **n-Fibonacci** constant is the ratio toward which adjacent n-Fibonacci numbers tend; it is also called the **nth metallic mean**, and it is the only positive root of $x^2-nx-1=0$. For example, the case of $n=1$ is $\frac{1+\sqrt{5}}{2}$, or the golden ratio, and the case of $n=2$ is $\frac{3+\sqrt{5}}{2}$, or the silver ratio. Generally, the case of n is $\frac{n+\sqrt{n^2+4}}{2}$. Generally, $U(n)$ can be called **(P, Q)-Fibonacci** sequence, and $V(n)$ can be called **(P, Q)-Lucas** sequence.

Exploring the Greek word for 'GOD' (= "Θ Ε Ο Σ")

OBSERVATIONS

Dr. A. S. Raleigh (1932). *Occult Geometry* [A course of Private Lessons Given to His Personal Pupils. [online] Internet Archive. Available at: <https://archive.org/details/raleigh-a-s-occult-geometry/page/n1/mode/2up> [Accessed 16 Jan. 2023].

"The Circle is employed to symbolize the Universe for the Universe is without beginning and without end in space **there being no point where it begins and none where it ends**, that is to say, there is nothing outside of the Universe **it includes all things** within its own compass and therefore, it is symbolized by the Circle.

The Circle is also used as a symbol of Unity, **representing the one which contains all things within itself**. Differentiation is caused by the energy going in two directions, but as long as Unity is preserved, the circular form must remain."

O = In the design process, the circle includes every imaginary or realistic form of this world. The all is in the all. The digital root of O in the Greek Alphabet is seven.

Theory of Semiotics

denotation = connotation

$$x = y$$



F_{n(mod10)}: All the digits of the arithmetic sequence on a circle. Every single connected line has the sum of the value of 10.

E = 3 straight diagonal lines arising from one vertical; The three lines turn towards the earth ("plane") or the form; It is concentrated the three principles of classical architecture [Vitruvius's 'de Architectura' Book III] known as the "orders" are:

1. The **base**, or "stylobate," includes the foundation and lowermost parts of the building, such as the plinth and moldings.
2. The **"shaft,"** or "trunk," contains the main body of the building, such as the columns and entablature.
3. The **"capital,"** or "head," consists of the uppermost parts of the building, such as the pediment and cornice.

These three parts together make up the "orders" of classical architecture, which are based on the proportions and decorations of ancient Greek and Roman buildings. The orders are used to create a sense of harmony and balance in the design of a building, with the base supporting the weight of the building, the shaft providing the visual structure, and the capital adding decorative elements.

The Greek Letter E represents the side view image of the union of the **Masculine** and the **Feminine Gender**. This letter is a mental representation of the harmony of two forms. The "Epsilon" (=E) has a value of five, and it is in the middle between the first nine letters "A, B, Γ, Δ, E, F, Z, H, Θ." The geometric figure of "Epsilon" describes the balance. This balance is implied by the letter "Phi" (=Φ), in which the digital root of "Phi" is the five.

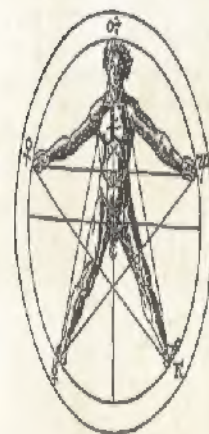
m	n(n)	numbers of zeros in the cycle	F _n (mod 10) - cycle	On-Line Encyclopedia of Integer Sequences sequence for the cycle
10	60	4	0 1 1 2 3 5 8 3 1 4 5 9 4 3 7 0 7 7 4 1 5 6 1 7 8 5 3 8 1 9 0 9 9 8 7 5 2 7 9 6 5 1 6 7 3 0 3 3 6 9 5 4 9 3 2 5 7 2 9 1	A003893

m	n(n)	numbers of zeros in the cycle	F _n (mod 7) - cycle	On-Line Encyclopedia of Integer Sequences sequence for the cycle
7	16	2	0 1 1 2 3 5 1 6 0 6 6 5 4 2 6 1	A106870

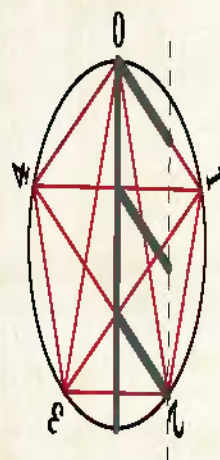
m	n(n)	numbers of zeros in the cycle	L _n (mod 7) - cycle	(Dunlap, 1997, p. 57)
7	16	2	2 1 3 4 0 4 1 5 6 4 3 0 3 3 6	

m	n(n)	numbers of zeros in the cycle	F _n (mod 5) - cycle	On-Line Encyclopedia of Integer Sequences sequence for the cycle
5	20	4	0 1 1 2 3 0 3 3 1 4 0 4 4 3 2 0 2 2 4 1	A082116

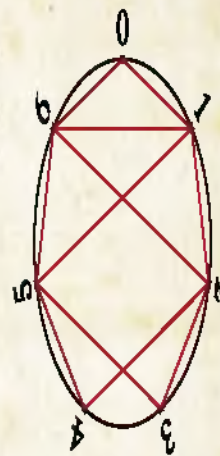
Pentagram from Heinrich Cornelius Agrippa's *De Occulta philosophia libri tres* (1533). The symbols in the circle represent Mars, Jupiter, Saturn, Mercury & Venus.



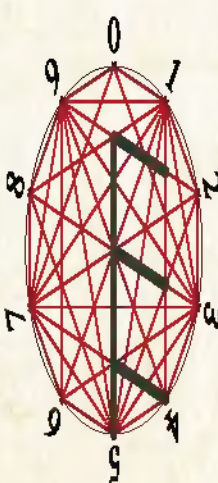
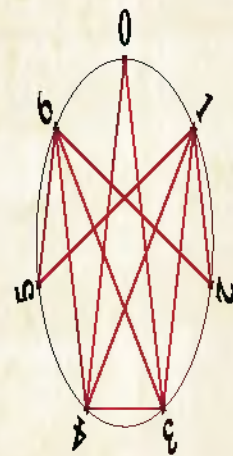
L_n(mod5): In a circle, connect the points of the arithmetic sequence.
L_n(mod5): {Util[s,z]}e the max value of the digits in the periodic sequence}



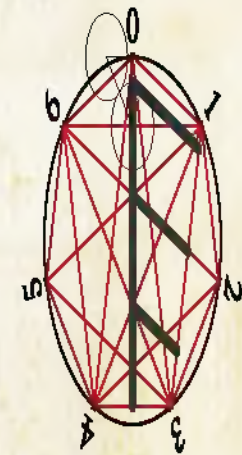
F_n(mod10): In a circle, connect the points of the arithmetic sequence.
F_n(mod10): {Util[s,z]}e the max value of the digits in the periodic sequence}



F_n(mod7): In a circle, connect the points of the arithmetic sequence.
F_n(mod7): {Util[s,z]}e the max value of the digits in the periodic sequence}



OR



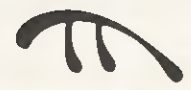
OBSERVATIONS

The Greek word for God seems to be something humanly indefinable, that is, something ineffable, while it encompasses the notion of infinity within it. It partakes in the logic of the principles of the mathematical laws of the Universe that create and destroy structures according to specific rules expressed in mathematical terms. The word THEOS describes some fundamental laws of existence. 0 and 1 are God, but God is not 0 and 1. God is the Creator, but the Creator is not God. The fact of intangible existence expresses God; it has neither beginning nor end, and He also would create everything. These sentences would geometrically be expressed or connoted symbolically by a circle.

GREEK ALPHABET | CIRCLE | 27 LETTERS

OBSERVATIONS

Φ Ω Σ (phôs), Φ Ο Ω Σ (phóōs), Φ Α Ο Σ (pháos)
Φ Α Ξ Ο Σ (phawos), Φ Α Ε Ο Σ (pháeos) 69



= The abstract rendering of the image of the soul. It symbolizes its recycling in the Universe. Everything that exists has a soul. When life stops, the soul moves in another form. Diogenes Laertius shows this ancient belief of the ancient Greeks:

"Synagogue of Philosophical Lives and Doctrines" [3.44]

"A. Eagle, why fly you o'er this holy tomb? Or are you on your way, with lofty wing, To some bright starry domicile of the Gods?"

B. I am the image of the soul of Plato, And to Olympus now am borne on high; His body lies in his own native Attica."

Translation Reference: yorku. (n.d.). Diogenes Laertius. [online] Available at: <http://www.yorku.ca/pswarney/Texts/plato.htm> [Accessed 17 Jan. 2023]. ‡

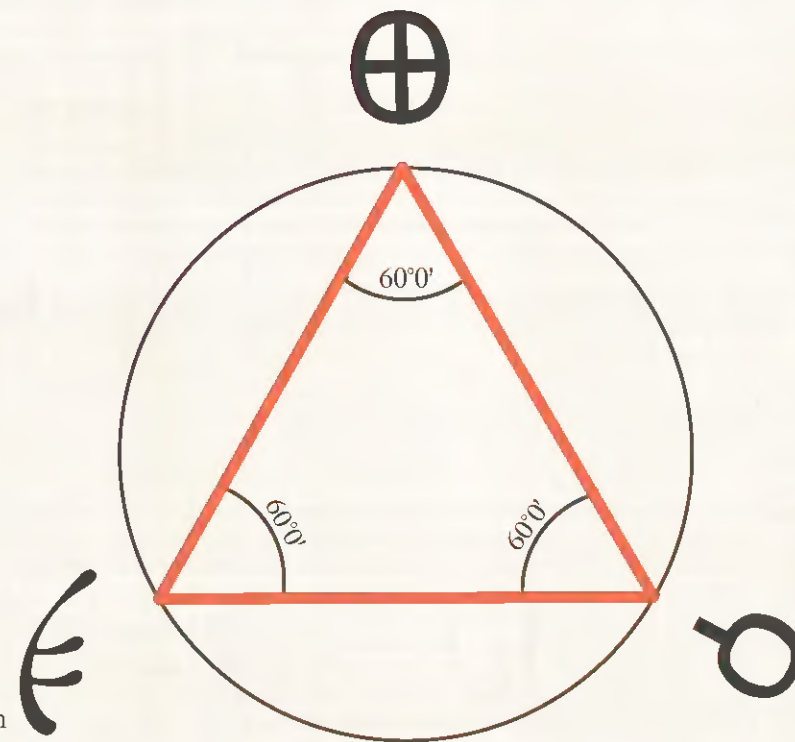
Θέση (x,y)	1	2	3	4	5	6	7	8	9
1	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ	
	Α	Β	Λ	Δ	Ε	Ϝ	Ι	Θ	⊕
	1	2	3	4	5	6	7	8	9
2	Ι	Κ	Λ	Μ	Ν	Ξ	Ο	Π	Ϟ
	Ι	Κ	Λ	Μ	Ν	Ξ	Ο	Π	Ϟ
	10	20	30	40	50	60	70	80	90
3	Ρ	Σ	Τ	Υ	Φ	Χ	Ψ	Ω	Ϡ
	Ρ	Σ	Τ	Υ	Φ	Χ	Ψ	Ω	Ϡ
	100	200	300	400	500	600	700	800	900

Possible diagram of the soul's motion from the unknown ancient designers by placing the letters with a numerical value of base 9. The diagram is extracted from the letters "theta" (9), "koppa" (90) and "sampi" (900) of the 27 Greek letters. Corresponding philosophical thought appears in Pythagoras' view of the soul's motion.

Theory of Semiotics

denotation = connotation

$$x = y$$



= The letter 'Thita' ('Θ') describes the structure code of every form. The minimal and abstract design of the numerical sequences that run through the forms. "The Fibonacci sequence turns out to be the key to understanding how nature designs... and is... a part of the same ubiquitous music of the spheres that builds harmony into atoms, molecules, crystals, shells, suns and galaxies and makes the Universe sing." – Guy Murchie ‡



= The letter 'Qoppa' ('Ϟ') expresses the principle of new system creation from a completed structure form. The line implies the direct path. It also symbolizes the separation of one from a whole. For example, the newborn falls steeply to the ground in mammalian animals. ‡



= The 3 Greek letters concentrate on the three general truths about the life of this Universe: life, reproduction, and death. The digital root of the letters is the nine. On a circle, an equilateral triangle is created when points are connected. The circle implies the cycle of existence. The three sides of the triangle has the same length. In Euclidean geometry, it is considered a special case of a regular polygon, as it is the only regular triangle. ‡